When you're told in airplanes, you know, if a situation happens, put your mask on first and then help others. And you do that because if you don't put you mask first, your going to pass out.

You'll be unconscious in seven seconds. So you really need to put on your masks first in life. Then you can help other. Making life your healthy number one priority just makes life really much more enjoyable.

This is the Longevity CEO where we explore the science of metabolism, cellular renewal, and the future of longevity. This is Joseph Anton, your co-host for the Fasting and Longevity Summit.

Today, we have a special episode. It's not with a physician, but it is with the person that has dedicated a lot of time to read, to know, and to practice to get results into longevity in general while applying fasting as well.

This Brian Johnson. A lot you know him because he's the founder of BrainTree and Venmo. He exited that and decided to change his life and humanity's life by starting to put a lot of.

His investments into self care longevity care and also tries to expand that into knowledge that he can transmit to people around the world and see what works with this not sure that people are on the word so and i think brian is working also on.

unlocking a lot of complexities into longevity and transmitting that into algorithm that can tailor longevity to each one of us and get us to even an extra level of potential.

They can help us stay healthier longer. That's the key here is to increase health span. Brian, welcome. Thank you for having me. I'm excited to be here.

Thank you for your time today. I want to just hit the road right away. First, I would ask you, anything you want add to my introduction? Anything you would emphasize that people would find interesting to know about you as well?

The origin of Blueprint is a thought experiment. And after selling Brain-Free Venmo, the question I posed was, imagine that we're observing a conversation that people are having in the 25th century.

What do they observe about the early 21st century that they find remarkable that allowed intelligent existence to thrive in this part of the galaxy? And I found that to be a fun game because focusing on the here and now, you oftentimes can get trapped in the current zeitgeist, the status quo.

And if you look throughout history, we read biographies. People who lived in a certain time and place basically lived, in the past, because they were parroting the views and opinions and science of what has been.

And there were a few people among them that had really seen the future, but they usually thought to be crazy or they rejected by others. And so it's always a fresh reminder that whatever you see today is actually the past you're living in the.

And the future is already here. You just need to be able to discern where it is. So that's really where blueprint came from. But I think this is something that would be remarked on this general thing we're all working on in a 21st century.

Well, this is, uh, great and we can mention a lot of names that even recently, you know, when Elon Musk started and others, This is what they were in a blame for, for being too futuristic.

And then a decade or two after they're the people leading the trade in that sense. So I know you've invested a of time reading, experimenting, flying.

You know what have you learned that you would love to trust it today to people listening to us who are very concern about not wanting to be sick long and want to optimize their health span.

And if you can after that give a twist on fasting or an emphasis on fast. Yeah. I'll share a little story that will capture this that would be memorable.

So there's a Navy captain out at sea, and they receive a transmission, change course 20 south. The Navy captain radials back, Change course 30 north. And they received that communication, repeat, changed course, 20 South.

At this point, the captain's irritated, And, they report back. This is captain so-and-so of the fleet, so and so. Change Course 30 North. and, They received the transition back this is a lighthouse, Changed course twenty south In that moment, the captain had always gotten its way because it could use their power and authority and bluster to make anything move out of their way.

In this case, there was a lighthouse that he had to contend with. And when I was approaching My Health and Wellness, I wondered, is health and wellness at a light house moment?

Where previously, we used our minds to makes this or that guess, like eat this, or do that. We listened to your charismatic people tell compelling stories.

But we recently crossed into a threshold where the data and the science has crossed a threshhold of being good enough where it is now a lighthouse. Our health and wellness no longer needs to thrive on stories.

We can look at data, and evidence, then we can do this close-up cycle with algorithms. And that's what I think Blueprint is. It represents this moment in time where homo sapiens transitioned from storytelling for their health to data in science.

That's fantastic. And you know, as you I'm a big believer inspired with Walter Longo. I think he's one of the few as well that spend a good two, three decades just doing science on longevity before he came up with and I agree with there's enough science and different coordinates now that if we aggregate them together, and if you use I don't know how to use the word AI, but using more algorithm to tailor those to every person as well.

This is where we can reach the optimum longevity. Exactly. Yeah. That's what Blueprint is. Like we basically, I hired a team of 30 doctors and we devoured to say, if we search through every single study that's ever been published on health span and lifespan, we rank them according to priorities.

And then we try to implement it and basically with a perfect adherence to the protocol, what could be achieved in science today? And that's what we've tried to do is provide a data point on where are we at in 2023 with implementing all the best gold standard scientific evidence.

And what are the things that you've learned? What are things you're applying to your health? Do you think people should do? Ah ha, the big we are for sure to that and then we'll say we're less sure about other stuff.

Yeah, I think there's about 20 accomplishments we have as a project that I thing are compelling. So for example, like I reduced my speed of aging, looking at my DNA methylation markers by the equivalent of 31 years.

Right now, my body accumulates aging damage slower than 88% of 18-year-olds. My total bone mineral density is the top 0.02% of 30 year olds. My VO2 max is a measure of my cardiovascular capacity is in the 1.5% percent of 18 year old and like so on and so forth.

So even if a scientist wants to comment that one of these markers is not reliable because of whatever this or that, if you look at my health profile, it's I'm in stunningly good health across the board.

And so I think the thing that's interesting is The science works. If you actually look at the science, you implement the signs and you measure it, it is actually really promising.

So, and that's especially true because I really trashed my body and mind for two decades. I did not come at this from a place where I'd lived this whole way my entire life.

And so if I can turn my, my buddy around, so can everyone else listening. But I guess the point is, this really does work according to evidence and data and not someone's story.

What are the few things that you do to release a coin? I eat a very strict diet. So it's exactly 2,250 calories. Every calorie has had a fight for its life.

There's nothing that's in there for a random purpose. I fast for between, I guess, about 18 to 20 hours a day, thereabouts. And I go to bed at the exact same time every night.

Okay. And this is important because, you know, I met you a few weeks ago and you were kind enough to host me at your place. One thing that really struck me when I was there was you do the opposite intermittent fasting than most people do, right?

They typically skip breakfast. They keep their, they starve their body all the way to the end and then they binge, or they eat a lot. Can you talk about when do you eat?

Because I think this was one of One of the real effective secrets is you're taking the calories and you can detail it more when your body needs them because which is in the morning, but yeah, I ran a few hundred experiments about what to eat and when to Eat and as it relates to my sleep because my Sleep is there's nothing that changes my conscious experience more than sleep and I finally after a Few hundred Experiments I found that if I consume all of my days calories by around 11 a.m So I have, you know, about 10 hours or so of digestion.

By the time I put my head on my pillow, my resting heart rate is about 46. And when my arresting heart rates are 46, I'm almost guaranteed a perfect night's sleep.

Two and a half hours REM, two and half hour deep, like less than 30 minutes awake. I get really high quality. Now, if I know if i eat my last meal at six or seven, I've exceeded my calories or have eaten something that I shouldn't have.

My resting heart rate will be somewhere between 56 and 65 and I will have a terrible night's sleep guaranteed. And this is, I think is critical because you know, fasting grew and is the number one diet in the US for several years.

I mean, if you take away clean eating and low carb and now the science is showing a lot of great positive impacts and some articles are showing that great.

outcomes and it's not that fasting work or doesn't work is that you have to do white fasting i think this is what you do a lot of us and and the saturn pandas and valter longus of the word and us here you and i we're a big believers of what we call front and intermittent fasting meaning eat early in the day and then don't go to bed full on your stomach.

This is where fasting fails in some of the trials is when people are just eating and then snacking before they sleep as well. They spend the entire day and it's very important.

The morning is the essential organ. In the morning we go to work, so the brain is working at the highest capacity. Muscle right sometimes we go to the gym in the morning for those who do that you've got to work so in The morning is the true reason calories this way you lose weight if you skip it, but you're skipping the wrong times Don't skip in in a morning.

Skip it late in today and yeah Yeah, I mean though that evidence kind of matches up with my life experience where I've had a few dozen friends and family try to do what I have done and I I caveat and say look this is me and You may be different.

Like you may find that you do better when you eat at night. And so I don't want to say anything about that. You just run your own experiments. So far, every single person that has tried to do this has ended up eating their calories in the morning.

I've yet to find somebody who does it at nighttime. That's not to that someone can do it and night and still be successful. Maybe they can. It's just that my experience has been a work for me and everyone around me.

so, I agree. it's pretty compelling with what I have seen so far. Yeah, and to be practical, a lot of us are also social creatures. Many want to still have their dinners.

Yeah. Hey, get it at 6 p.m., which exactly is 6-7, which is where what our ancestors in human evolution, we didn't have electricity. They had to rush.

Gather a few things, go and prep a sleep and then eat when the sun is down. And this was, we always talk about the Nobel prize in medicine in 2016 on autophagy, but the noble prize of medicine 2017 was biological clock of the organs.

Having to sleep overnight, every organ has to see, it's not just the brain and the muscle. And it's important that they have a full, perfect sleep versus being disturbed by food.

So for those listening to us today, we're not saying all of you like Brian should eat just in the morning. It's a pretty hard commitment that he's making and he is trying to lead by example.

But 100% try to have your dinner as early as possible versus eating and sleeping. And another way to round it. For example, when I go out for a social event with friends, I found early on that if my plate has nothing on it, everybody at the table is so uncomfortable.

You know, it's like, why are you not eating? Are you okay? And so then all the questions get directed towards me and then no one gets to have the dinner experience I really wanted, which is to hang out and have fun.

And I started solving for that. I would save up around 500 calories and I will just get some steamed vegetables and that would just kind of pick away at a dinner.

So that way I have something on my plate. No one's going to ask me questions about my behavior and everyone's there and get to enjoy the social event.

Sometimes I'm okay, you know, that my resting heart rate will be around 46, 48, 49 and I'll still be okay. But I will say that, for example, to your point on the perfect quality of sleep, why it's so important is the next day following sleep.

If you're staring down a cookie, like let's say like a, a big delicious, creamy chocolate chip cookie. The probability that you're going to eat that if you've had good sleep, I'd say is like 1% because you have good discipline.

So you'll have a lot of willpower. If you had a poor night's sleep and you are not feeling great, you got like a 75% chance of eating it. I found that my will power is directly tied to my sleep which then allows me to be strong in everything I do.

It's really building this cyclical compound of momentum where I can be the kind of person I want to in life because I'm powered to do it So a little bit similar to when I go out and, and my friends are eating and I, typically I'll be on a, on the prola or something.

So we have the soups and or the fast or fast shake, which you can get and your body would still even cross. You do it with vegetables and in, but if you do a bit of the healthy fats from the nuts, Which we haven't a fast for the fasting shake.

It even keeps you. If you haven, you, haven you have an eight, all that, that night. But thanks for the tip because a lot of people would be asking now.

Okay, how am I gonna survive that dinner? Yeah, yeah And tell me what do you eat? Otherwise like what he eat between he said 8 a.m. And 11 What is what is your diet like?

What are the ingredients? The first meal of the day is super veggie It's broccoli cauliflower black lentils ginger garlic hemp seeds and then a tablespoon of extra virgin olive oil and My next meal today is nutty pudding, which is macadamia nuts, walnuts, flaxseed, two ounces of pomegranate juice, sunflower lechin, berries, and some pea protein, a tablespoon of extra virgin olive oil.

And third meal of the day varies every day according to just like vegetables and berries and nuts. Yeah, I have some dark chocolate and that accounts for the 2,250 calories.

Fantastic. And so I want to zoom out and we focus a little bit on Fassi. You were saying, what are the pillars of your diet and lifestyle today to be able to, and I think you did the Horvus test and other tests that show that you're younger than, so what other pillars that do throughout the day?

I exercise for an hour a day, a combination of stretching, cardio, strength, and I did markers on that. For example, like I, again, I'm top 1.5% of 18 year olds.

My body's ability to utilize oxygen, which is phenomenal. I can, you know, single leg rep max 800 pounds on my leg press 240 on the bench. So I'm not training for real strength, but you're like, I guess what I am saying is there's data to show that these things are compelling.

And then I always, as a team, we're always trying to figure out new therapies that work. For example, i'm currently doing whole body musculoskeletal rejuvenation.

So we're basically posing the question, can I get my tendon ligaments back to 18 age functionality? Now it's a pretty big challenge because you can't regenerate cartilage, you know, as you, know.

But we take on these unreasonable challenges to try to say, what can we do to really push the boundaries of what's possible? Like we've done with my other organs, like we tried to, say can, we, take my heart and get down to age 18 functionality.

It's kind of a crazy thing to see in 2023, but we did do these kinds of unreasonable endeavors to what we can push with the science. Fantastic. Do you do any intensive exercise?

I do. I, I three times a week, four minutes of high intensity training, 4 minutes rest, for minutes, high-intensity four-minutes rest. So four by four intervals.

That's it. In how about stress management? Did you do anything for any, anything, for stress measurement or. I meditate morning and night. And then all throughout the day, I'll peel off and they'll do some breathing exercises for just two to five minutes.

Like even the shortest window of time, just relaxing my body to shake away the stress. So I do try very hard to keep my. In like a relaxed state. And how about sleep?

How do you optimize sleep or is the temperature type of any recommendations on sleep that you? Yeah, my life is built around sleep. That is exactly contrary to the status quo where if you sleep under your desk or go days without sleep, you get hero stories told about you.

And I'm here to say that a new norm is here. It's don't die. So my eating is highly structured for sleep but I have a temperature a temperature controlled mattress, eight sleep, blacked out curtains.

I don't do anything in my bed or my room except for sleep. So it's only for that. Same time to bed every night. And yeah, I just completed six months using Whoop with a perfect 100% sleep score.

No one has ever done that before. Many people who've used this wearable for a year have never achieved 100%, a single time. and I got every single night for six month.

And so it was something I wanted to show that you, you can achieve high quality sleep every single night. You just need to work at it. And how do you prepare for it?

So we talked about getting early in the day as a meditation before sleep, right? Yeah, most importantly on that bit is that I have an hour wind down time.

So by 730, I need to stop working because if I don't have a hour for my brain to wind-down and I work right up to when I go to bed, my brains is still in work mode and i will ruminate on work problems all night long and my sleep will be terrible.

I'll need the one hour separation and then I can be in my proper state. I just know this from experience. I wind up next to bed and excuse me, a miserable night.

And Ryan, talk to me a little bit about your level of happiness, social capital. Are you feeling you're compromising? To enhance your longevity, are you feeling, you know, is this like, tell me a little bit about first, how are invested versus your family, your friends, etc.

And number two, How are your feeling going throughout this experience? I never would have believed myself if I could travel back in time and I can tell myself how good we would feel.

I would never want to believe me. i've never been happier or more fulfilled or stable in my entire life. I think I was on this roller coaster chasing my next dopamine hit.

Whether it be from food or some event or been watching my new show, I would chasing this pleasure. And now my life is just very steady. I don't experience these big highs and these lows.

It's just pleasant to be me. For the most of my live, It was not very pleasant at all to me. I was chronically depressed for a decade. And I went through some really difficult times as an entrepreneur, as a father, or as spouse.

Some really hard stuff. Boy, I wish that in those hard times I could have spoken to someone like myself and said, hey, what do I do? And making your health your number one priority.

It's like when you're told in airplanes, you know, if a situation happens, put your mask on first and then help others. And you just do that because if you don't put you mask first, You're going to pass out.

You'll be unconscious in seven seconds. So you really need to put on your masks first in life. Then you can help other. Making life your healthy number priority just makes life really much more enjoyable.

That's fantastic. What do you, before we depart here, what do want people to know? What if, if you want to, I mean, we talked about a lot of things that we want them to now, but you wanna summarize in two, three points.

And if want try to impact their lives, will be your final messages to them. Yeah, you can do this. If you're listening, You can't do that. I'll tell you the trick I did to get me started is, At 7 p.m., there was a version of me, evening Brian, and he was so stressed out and upset about life.

He had so many problems at work and it was in a challenging relationship and had three little babies. 7 P. M. would arrive and the weight of the world would be on his shoulders.

And the only way he knew how to cope with the situation was to go to the fridge and get those brownies or cookies or whatever it And he would binge eat as a way to dull the misery and the pain he felt.

And that led to me being 50 pounds heavier than I am now and just miserable. That would, of course, wreck my sleep, which would make my depression worse.

Like I was just desperate. I tried so many times, like, Brian, I'm not doing it again tonight. And so I fired that version of me and he know I revoked his authority.

So he didn't he never had the ability to eat from five to 10 p.m. and it changed my life. Once I really understood that I am a collection of Brian's, morning Brian afternoon Brian ambition Brian dad Brian like I've all these different kinds of persons.

Not just one that changed. My life and so for you who are listening, Sometimes stopping the bad things in your life is the most powerful thing you can do to start doing good things.

In your. Most of us think we want to. Start doing something positive, but it's very, very hard to get started. And if you get a little bit of a win by tackling some version, some rascal version of yourself, sometimes I can give you the, like just enough get up and go to, get on the right track.

And when is the time to start? If you don't talk to people, when Is the Time to Start? You know, it's really worth thinking out. Like, for example, like if I am thinking through that situation, evening, Brian, I failed probably a few hundred nights, you know where I said I guarantee I promised myself I will not binge eat tonight.

I did. It probably took me a hundred times. And it was discouraging. And I wanted it so badly every day to stop. But the right time is when you can really get yourself in a position where you're like, you know what, I think I'm ready and I have the tools and the capacity to do it.

It's also important to be realistic with yourself. Change is very, very hard and you don't want to beat yourself up and make the situation even worse.

So you are okay, it's okay. You can get out of any situation you were in. And don't create unrealistic expectations of yourself. Create a plan where you can win.

So when the timing is right, you'll know when it's right. I can relate to that. And I had also a chunk of my life where I would do the same, which probably most people do same.

Up until actually a notion of it wasn't just the right way of eating, but actually even as working, because we always say, if I don' work at night, I have a lot of work and need to work.

It actually, when you stop doing that and you have a right sleep, you're more productive at work. You get your work much better done in such a short period of time the next day with a lot more fresh face and focus and length of clarity and all of it.

And what helped me also, I was probably do the same reading some biographies about different types of people. In a of them actually they do that, and they just digress a little bit at night in the morning, even they take time to, to wake up, be a bit social with the family or read the newspaper.

So it's not the time you put on a project is, is the quality. I mean, sometimes if your job, if you're job is pure mechanic, then you have to do the title.

But executive to say, oh, if I don't work 14, 16 hours, I'm not going to get it done is actually no. If you work that 12 to 14 max hours you'd actually would get more done versus working that 16. Exactly.

That's the thing is like you, there's been a paradigm shift. Most of people don' know what's happened. Previously it

was imagined if you want to build the future, sleep under your desk or work through the night, And now, I'd say, if you want to build a future, sleep.

It's very counterintuitive, it's countercultural norms. it takes courage to do something, but that's where we're at as a species. And like, don't… I think, again, when the 21st century looks back, the 25th century, looks, back they're going to see this don-die movement where human homo sapiens figured out that death was potentially no longer inevitable.

and it really changed everything on how we think about taking care of ourselves and each other. So Brian, before we depart, what is your goal for your longevity?

What do you think you're going to, how do see your future? I mean, after a few billion years evolution on this planet, lucky us, we exist when super intelligence is baby steps away.

Death has always been inevitable. And for the first time ever, it may not be inevitable Now, we don't know, but we're on the cusp of it. And so to me, the only thing that matters right now is don' die.

Don't die individually. That's live enough to live within the lock that is. Exactly. don''t die, individually, don´t kill each other, Don´ t destroy the planet and like be around for what could be the most extraordinary existence in this part of the galaxy.

It just would be such a tragedy for our loved ones, for any of us to miss out on this future. So it's a different time to be alive. And the faster you can hear this message and take care of your health, the better off you're going to.

Be. You don't want to miss it. Like, this is the thing, you know, like when, when germs were discovered as this vector of people were dying during childbirth or surgeries, You.

Don't. Want. To. Find. Out. About. Germs. An. Infection. 20. Years. After. The. Discovery. Because. you. Are. Going. to die. He. Wants.to. find. out. Right.

When. It's. Done. This. Here. I. Think. Is. That. Moment. For. All. Of. Us. Ray Johnson, thank you very much for your time today. I appreciate you. Yeah, I enjoyed it.

Thanks for having me. Thank you so much.