



The Science Behind The Power Of Plants | Simon Hill

[00:00:00] Podcast Intro

Darin: You are listening to the Darin Olien Show. I'm Darin. I spent the last 20 years devoted to improving health, protecting the environment, and finding ways to live a more sustainable life. In this podcast, I have honest conversations with people that inspire me. I hope that through their knowledge and unique perspectives they'll inspire you too. We talk about all kinds of topics, from amping up your diets to improving your well-being to the mind-blowing stories behind the human experience and the people that are striving to save us and our incredible planet. We even investigate some of life's fatal conveniences, those things that we are told might be good for us but totally aren't. So here's to making better choices in the small tweaks in your life that amount to big changes for you and the people around you and the planet. Let's do this. This is my show, the Darin Olien Show.

[00:01:11] Guest Intro - Simon Hill

Darin: Hey, everybody, welcome to the show. This is Darin Olien. This is The Darin Olien Show. I'm stoked to have my next guest to bring in the power of the plants. The proof is in the plants, my plant-powered awesome friend, Simon Hill, all the way from Australia. We did this in person. We had a blast. We could sit and talk under this oak tree outside talking about plants for a very long time, this guy is dedicated. We got into details about plants that you are going to be inspired about. We got scientifically detailed information about how you need the plants and how meat, dairy fish, and eggs are less and less necessary. If you haven't sorted that out by now. Come on, you gotta get educated, and that's what Simon is all about. He's got an amazing story that we dug into about his motivations, about his genealogy, about his father's incredible story of how he almost died right in front of Simon, and how learning and seeing the epidemiology, and that your genes don't have a big effect as what you are actually doing for yourself and your life. Come on, you've heard this, but we get into it. Simon is such a delight. He is a friend. He is an ally. He is a brother that is committed to getting out the truth. He's not dogmatic. He doesn't worry about whether you adopt his lifestyle, my lifestyle, or whatever. He's just delivering the facts from a scientific perspective. He has a master's in nutrition. He has worked with the likes of Chris Hemsworth, with fitness apps and diets and health. He has an incredible podcast, Plant Proof Podcast. Believe me, you want to check out his new book, The Proof is in the Plants. That's right, ladies and gentlemen, Simon just cut right to it with the science, with it being incredibly fun to read. If you want to nerd out about the science, he has tons of that for you. If you want to just up your game in terms of what you should put in your body, what you could put in your body, well, the proof is in the plants. Ladies and gentlemen, and he's dug into that. Again, kick back, relax, take some notes, and enjoy this next conversation with my good friend from Down Under, Simon Hill.

[00:03:58] First Part of the Interview



Darin: Dude, thanks for being here. So great for you to be on the property from Australia in California under the oak tree being looked after by Chaga. Come on, Simon Hill, thanks, brother.

Simon: Thank you so much for having me here. It's a beautiful spot. I love the setup. I love the oak tree. I love Chaga, getting to know Chaga. He's great. Honored to be here.

Darin: Yeah, man. The last time I saw you we were finishing up Down to Earth and I was on your podcast. We were talking about how crazy we slipped into Australia at a beautiful time where COVID was really felt like it was leaving. Then it obviously went into craziness right now. Then you got out and you've been traveling around the US a little bit.

Simon: I have been here for about a month. But you're right, Australia went into a 100 plus days lockdown, at least in Sydney anyway, where we were together. You timed that perfectly.

Darin: That had to be divine at that point because that was like a 20-person crew, the timing of a show, and it's beyond anything you could have predicted. So you're here really about your book. Talk to me about your book a little bit. It's such a great book.

Simon: Thank you. So the book is called, The Proof is in the Plants, and it was about three and a half years of writing and the better part of seven or eight years, I guess, of more or so life experience and reading the science and really feeling like I had a message that I wanted to share.

[00:05:35] The story behind The Proof is in the Plants

Simon: I wanted to speak to some of the confusion that exists around nutrition. As you know, it's a very triggering, and I think polarizing topic. I feel for the average person out there, it's extremely hard to make sense of everything. I could relate to that. I could remember long before I had studied nutrition, feeling bamboozled myself. So in many ways, this is a book that I perhaps would have loved to have had myself 10, 15 odd years ago to make better decisions and better decisions for my health that could help me take better control of my health and leave me feeling more confident in those decisions. Also, decisions that are more thoughtful in terms of how do the food choices that I'm making affect the world around me as well. The book, in a nutshell, walks through what are some of those sources of confusion because I think, when we can better understand what they are, then it's sort of easier to be aware of them and navigate our way around them because let's be honest, that environment is not going to go away. A large part of this will come down to how well we can navigate that. Then as we walk through the sources of confusion, we then move on to where does the science lie? What evidence-based information do we have to make better food choices, food choices that will leave us feeling better on our day-to-day and hopefully better for longer? Then the third part of the book is like the practical information. That's the science that's all well and good, but what steps can we take to start putting this into practice? My message really in the book is not necessarily about telling someone how to eat. I want to give them the information, the actionable steps, and then let them find the level of commitment that is right for them. So that's kind of the idea of the book and it was initially released in Australia by Penguin earlier this year. Then November 1st, it comes out in the States, so that's why I'm here.



Darin: That's a good reason. Why don't you give someone an idea of some of the myth-busting that you did in the book, at least the ones that you want to talk about at this point because there are the normal ones, there's the proteins and things like that? But what would you like to tee up for someone and some of the things that you tackled in the book?

[00:08:12] Myths surrounding plant nutrition and saturated fat

Simon: I think one of the central parts of the book is around the benefits of reducing saturated fats in our diet, and the health benefits that diet can offer. This continues to be a bit of a topic that is confusing. One minute you read that saturated fats are increasing the risk of heart disease. Then the next moment, you see a headline suggesting that saturated fats are indeed healthy and that the science had that all wrong. A large part of this comes down to context. In nutrition science, it's really important to be always considering the context. What I mean by that is, it's very hard to just say, is a nutrient or a food healthy or harmful without understanding? Well, how much, what exposure level are we talking about and compared to what? If someone's not eating saturated fat or a saturated fat-rich food, what would they be replacing it with? Because ultimately, that could dictate whether it is a healthy decision or an unhealthy decision. Also, within the context of what dietary pattern. There are all of these, I guess, little elements of nuance that I think sometimes are overlooked in headlines and in a sort of quick social media posts, which can lead to confusion. If I was to give a good sort of example that maybe will speak to this, there's a huge amount of research looking at saturated fat at multiple levels of study design. I guess broadly speaking, when I say that, I mean that the two major sorts of types of studies looking at nutrition and human health are observational, which are large studies that look at populations of people and observe how they eat, and what are their health outcomes. Then there are clinical trials. People will have probably heard of randomized clinical trials being a bit of a gold standard. It's a little bit more robust and reliable because you can really control what's happening and ensure that the only difference, for example, between two groups is the variable of interest that you're looking at. Whereas when you look at the study of population, there is a chance that there are other differences between those two groups that you're comparing. But when we look at this research that's looking at saturated fat across these different types of study designs, it becomes very clear that reducing saturated fat is a great idea for lowering your risk of heart disease, lowering your risk of having a stroke, lowering your risk of neurodegenerative disease like dementia. However, what you replace those saturated fat-rich foods with is critical.

Darin: So just by eliminating and eliminating by itself can't be looked at because obviously, you have a calorie deficit that you have to fill with something.

Simon: Exactly. So I could show you, Darin, a study that shows that saturated fat is not harmful for heart disease. What I would do is I'll go and select a study that looks at when you remove saturated fat-rich foods like meat and dairy instead, you eat lots of refined carbohydrate-rich foods. I could produce a result that shows that, in that instance, saturated fat is not harmful. We know that. If you swap saturated fat for refined carbohydrates, it's essentially a lateral move, or may actually even increase your risk of cardiovascular disease. However, if you swap these saturated fat-rich foods, your meats, and dairy for foods that are rich in polyunsaturated fats like nuts and seeds, monounsaturated fats, or whole grains consistently across the board, you see a reduction in risk of cardiovascular disease. So this



is one thing that I stepped through in chapter five. The main thing that I want the reader to learn is, those facts are interesting. The main thing I want is the principle. I want people to walk away understanding compared to what. So whenever they see anything on social media, and it's this food is healthy, or this food is unhealthy, in terms of evaluating that statement, and the science that underpins that, what was it being compared to, and that's sort of the important learning there.

Darin: Let's dive into the saturated thing a little bit. It's all context. If you're starving yourself of carbohydrates, and afraid of fruits, and all of this stuff and you find yourself in a ketone-rich state or ketosis, then all these guys are like, eat all the saturated fat you want and all of that stuff. Then they make this argument that saturated fat is great. Well, also your body is literally starved of the basic building blocks that it requires to survive. So it's literally in the survival mode, physiology 101 of ketosis. How do you then start because you're going to get that crazy ketone guy coming at you? What do you say about that, and his view of saturated fat?

Simon: My view of saturated fat is that when it's consumed above around 10% of your calories, which is definitely what's happening in those animal-rich ketogenic diets, you are significantly increasing your risk of heart disease, and you're doing that because as saturated fat increases in the diet, you get an increase in LDL cholesterol. This is the type of cholesterol that can get stuck in the lining, the wall of our arteries. Eventually, over time, that leads to the formation of plaque, these fatty bits that start to essentially clog up our arteries. It's called atherosclerosis. Here's the thing, Darin, this ketogenic diet has come really off the back of the Paleo diet. It's a bit of a pivot, a rebranding. What's fascinating is let's dig into the Paleo diet a little bit here because the logic behind how people are doing the Paleo diet today, it interests me, and I've looked into this. I've even interviewed various anthropologists on my show to really dive into this and better understand it. This is, I guess, largely based off the idea that we should eat like our ancestors did. There's this idea that if we do that, we'll have the health and longevity that we're looking for, but there are some, I guess, some flaws with this logic. Before we even dig into what our ancestors did or didn't eat or what they may have eaten, one of the arguments is that our ancestors didn't have a whole lot of heart disease. That may or may not be true, but one of the problems with that idea is that they were largely dying well before you would see heart disease through infectious diseases and other problems of the day that we're not experiencing today. If we were to more think about what they were eating, and there is quite a lot of data on this, it seems that there was no one single paleo diet, firstly. And across the world, some of these groups were eating more animal products and less plants, and some are eating more plants and less animal products depending on where they lived. It was really survival. If you look at the Paleo diet, the way that the Paleo diet has been constructed today, it is very much marketed as a low carbohydrate diet. This came off the back of a book in the early 2000s, called the Paleo Diet written by Loren Cordain. Interestingly, I was interested in how did he come to sort of the Paleo Diet being this low carb diet? If there was this very diet across the world based on geographical location and season, then how did we come to this one single paleo diet? What I found was really interesting was essentially went back to the Murdoch Atlas. That was where he got his information from and was able to look at 50 or 100 different groups of people across the world with Paleolithic diets. In the Atlas, rather than it showing you the percentage of calories from carbs, fat, and protein for each of these groups, it rated different



foods from how important they were from zero to 10, the level of importance. So it's not speaking to necessarily to the calories they were providing, but this kind of vague level of importance. Now what he did with his team, which I found interesting was, he went through and converted those into calories for each of the group, which maybe there is some sort of logic in doing that, but then he is where I think there's a problem. What he did was across those, that 50 or 100 groups, I can't recall exactly what it was, he took an average for carbohydrates for fat and for protein to produce what is now called the Paleo diet. I think that's the problem there. The greatest insight into how our ancestors were eating was that there was this huge variability that they were all managing to survive on. So taking an average seems to be really overlooking that. If we think back to evolution and what our ancestors were most interested in, they were literally eating to survive to get to an age to procreate. Evolution doesn't necessarily care about longevity and healthspan. As long as you can produce, that's the most important thing from an evolution perspective. My view of the Paleo with the diet is I think it's an oversimplification of how humans were eating. I think it's great. I think there are many aspects of the Paleo diet today that I actually really agree with. I love the fact it's based on whole foods, it doesn't contain ultra-processed foods, but I think that rather than sort of speculating that this single paleo diet is the best diet for longevity, we should be using modern science, modern nutrition science that's looking at various diets and health outcomes to guide us in a sort of more empirical manner.

Darin: I think that's a great point. I didn't know that about the oversimplification. We were always doing that as humans. The reductionism is just rampant in almost everything.

Simon: One thing I'll add that I think is absolutely fascinating is Loren Cordain, who wrote the Paleo Diet book, and I should add this, I think this is good context, he published a paper with a colleague. He wanted to be on record talking to what healthy LDL cholesterol levels are. Now, just think about this. This is the guy who wrote the Paleo Diet book.

[00:19:30] LDL cholesterol level standards

Simon: He's written this paper, and in his paper, he's creating an argument that we have accepted an LDL cholesterol level as normal in our society that is far too high and is not normal. So the average LDL cholesterol level in America is around 130. The sort of normal level is considered 100, low hundreds. But really, and this is what Cordain steps out in this paper, it's not until you get your LDL cholesterol down to 70 or below where you essentially do not see any of that fatty plaque atherosclerosis building up. That's consistent among healthy humans without atherosclerosis. It's consistent with nonhuman primates. Also, we know that when humans are born, their LDL cholesterol is down at that 30 to sort of 50 level before they're exposed to our environment. The reason that that's critical is because we know that saturated fat jacks up LDL cholesterol. In actual truth, Loren Cordain, even though I think he oversimplified the Paleo diet, if you go into what his recommendations are today, one thing he makes very clear is that the meat that was being consumed by our ancestors was very, very different to today. It was super lean, it had almost no saturated fat. We're talking woolly mammoths. So the closest you could get to that today if you wanted to try and approximate that would be some sort of game, wild deer or venison, antelope, maybe, and it's still a long way off. But essentially, that speaks to the fact that even if our ancestors were eating animal products, they still were able to have low LDL cholesterol. They weren't out there slamming lots of beef burgers and bacon and eggs.



Darin: Horrible food combinations.

Simon: Horrible food combinations. It concerns me because I get a lot of these low carbohydrate folks actually messaging me, Darin, that have LDL cholesterol at 500, 600. Here's the thing, the diet, in many cases, it may have helped them lose weight and that's amazing, but what happens is they go and see their doctor, and what do you think that doctor says when they run their bloods and they see a 500 LDL cholesterol level? They're like, you're on track for heart attack, and they try and write them a script for statins. Of course, there is a large percentage of people in these communities who do have a fair degree of fear and anxiety. Many of them do enjoy this low carbohydrate way of eating, but they are fearful for the effect it's going to have on their heart.

[00:22:16] Safesleeve Ad

Darin: So I have a question for you. What are you listening to this episode on? Is it your phone? Is it your laptop? Is it your computer? All of these things have EMFs. Whatever device you're currently using, it's actually exposing you to these harmful effects. Am I using a phone? Yes. Am I using a computer? Yes, we all are. But there are things that you can do, and that's why I'm super excited to be partnering with SafeSleeve. Every phone has a warning signal to keep the phone away from your body. So they have a sleeve that has a shield, and that shield blocks over 99% of the infrared radiation, and over 92% of the electrical low-frequency radiation that just comes off the normal everyday devices. If you have listened to my fatal conveniences on the EMF, then you already know this. That this type of radiation has been linked to increasing the risk of certain types of cancers, as well as having negative effects on the biology and the mental health, and on the actual cellular activity. Whenever I have my phone, I have the SafeSleeve panel on my body. If I put it in my pocket, either I shut the whole phone off and I put the radiation protector SafeSleeve to minimize virtually all of that EMF coming to my body. For all of my listeners, you get 10% off your order. Believe me, this is so worth it. Head to safesleevecases.com and use the promo code Darin10, that's safesleevecases.com and use the code D-A-R-I-N 10 and protect yourself, your family, and your kids. You could do that now without losing the convenience of a phone.

[00:24:22] Second Part of the Interview

Darin: One can argue and one doesn't have to argue at all about just the quality of food. Let's go back to the quality of food and that's always something to improve on. So from that perspective, it's really cool. I want to dive into some of those studies of the professor because that's some interesting things. You always find that in the studies, you're like, yeah, but that the meat that they were using is a class one carcinogen, highly, highly processed, so it's not the best study to use against a plant based person, and then those plant-based guys are eating processed foods too, so it's hard to kind of navigate through some of these studies. Speaking of, there's so much to talk about. I don't know where you want to go. I know I want to get to regeneration, but I also want to touch on, because this might be good for people, brains and berries. Let's talk about brains and berries. It's one of your fascinations.

[00:25:22] Brains and berries



Darin: What have you been finding, obviously, a lot of brain benefits, antioxidants, anthocyanins, and all of those things, but what have you been excited about with brains and berries.

Simon: I first got into this and went into the weeds, I guess, my entry point. I think it's a good way to kind of lead-in here was some work done by Dr. Martha Morris. She was, she's since passed away, a very prolific, well-known researcher looking into nutrition and dementia, so neurodegenerative diseases. She came up with what's known as the mind diet. This is a sort of a very, very plant-based diet. It's actually a hybrid diet of the Mediterranean and the DASH diet. These are two both plant-based dietary patterns but essentially, if someone hasn't heard of the mind diet, it's a plant predominant diet that has a little bit of fatty fish in there, there's a small amount of poultry which was included for adherence purposes more than any sort of nutritional value. Then it's super-rich in fruits, vegetables, whole grains, nuts, seeds, legumes, and has a specific emphasis on berries, and dark leafy greens. At the same time, it limits the consumption of red meat, processed meats, and ultra-processed foods. Martha and her team through their study called the MAP study, which is out of Rush University, they were able to see that in a population of people who were between 50 and 90 years old, those that had high adherence to that mind diet dietary pattern that I just explained, compared to those who had poor adherence, they had a 53% lower risk of developing Alzheimer's dementia, a really significant reduction in risk, which means their brains are operating as if they were much younger at a much higher level. The emphasis on berries and dark leafy greens really interested me. So I've done quite a bit of research looking into berries, and what is it about berries that is leading to this protective benefit when it comes to our cognition? It seems like there are a number of nutrients within berries that are beneficial, but one of note is this inclusion of these polyphenols. I really think that polyphenols, Darin, and I'm telling you something you probably already know, if I was going to say what trend in nutrition or nutrition science is really going to take off in the next 5 or 10 years? It's polyphenols. I know they've been spoken for years, but why I say that is that with the last 5 or 10 years, the innovation and better understanding of the microbiome, we're really starting to better understand polyphenols and how the body is utilizing them. So, polyphenols are phytonutrients. A lot of people will say they're not essential nutrients. While they might not be essential for survival on a day-to-day basis, and you might not end up with a sort of nutrient deficiency, they are certainly essential for the promotion of healthspan and lifespan. Here's the really interesting thing, 95% of polyphenols actually pass through the small intestine undigested and metabolized by our microbiome. Polyphenols have the capacity to be prebiotics.

Darin: Whoa, dude.

Simon: Mind-blowing, right? There are thought to be 500 to 1000 if not more polyphenols in our food. However, there are thousands of metabolites that are produced by the bacteria as they metabolize these polyphenol compounds. When it comes to berries, the main group of polyphenols that researchers are looking at is called anthocyanins. This is what gives berries dark pigmentation. What's interesting is that we have studies both long term that is looking at populations showing the protective effect of berry consumption. For example, in Martha Morris' other work, she was able to show that folks who were consuming one or more servings of strawberries per week, they had a 24% lower risk of developing dementia compared to those who are rarely consuming berries.



Darin: For how long?

Simon: That's just consuming one serving per week. So that's pretty incredible.

Darin: How long of a period of time was it studied?

Simon: That study was around 10 years.

Darin: It was done for one week for 10 years.

Simon: It's an observational study, so they're doing a sort of food frequency questionnaires. Then observing people over a 10-year period and seeing who develops Alzheimer's, dementia and who doesn't, and then looking at the difference in risk. Then also the Nurses Health Study, which is 16,000 women that were followed for nearly two decades. They found in their study that compared to people who were rarely consuming berries, those that were frequently consuming berries, their brains were operating as if they were two and a half years younger. Now, in that study, again, these people weren't consuming a lot of berries in a high consumption group. We're talking one or two servings a week. You can imagine what the benefits could be if you're consuming them on the daily. So those are interesting studies because it's more looking at the long-term sort of protective effect. But what I find really fascinating is that we have short term, clinical trials that are looking at, let's feed someone berries versus a control group who gets a placebo, for example, a blueberry smoothie, and have a control smoothie that's matched for sugar and energy, but doesn't have the blueberries in it. And let's measure their cognitive function over the next six hours. It's incredible. You see significant differences. This is in children, this is in healthy adults, and it's also in adults who have a mild cognitive impairment, which is the stage before someone could potentially go on to develop Alzheimer's.

Darin: So this would be right away. This would be like within you consume this and then within a period of time--

Simon: So there are some very interesting studies showing what happens after you consume anthocyanins in berries to our blood flow. We see peak blood flow at about 6 hours. The idea here is that you get this acute effect by increasing the perfusion, the blood flow to the brain in a very acute manner. In one study, in particular, they looked at various different measures of cognitive function. They were looking at how people performed over a six-hour period after the blueberry smoothie. And what they found was that those who had consumed the blueberry smoothie had significantly less cognitive fatigue across the course of the day. Cognitive fatigue, brain fog is a real thing that people experience every day. You hear people talking about the 3 PM kind of slump. So this is an immediate benefit that we can all tap into. This increased blood flow for me is really interesting because it really gets me thinking that if you're consuming these polyphenol compounds, your microbiome is metabolizing them. The downstream effect is this increase in perfusion to your brain tissue, then perhaps that is explaining the long-term protective benefit as well that we're seeing in those larger population studies.

Darin: What are we at? One in four people with dementia and Alzheimer's, that's a scary road to travel down. That's scary for the family, it's scary for the person. I can't imagine it. At



the core of it, you've got all these inflammatory actions that are contributing to Alzheimer's and dementia. You blew my mind in terms of the potential prebiotic kind of interaction with the microbiome because then I think if I look at the very, very core of metabolism, that's like taking photonic energy from the sun, uptaking nutrients from healthy soil, blah, blah, blah. Then ultimately, you're trying to liberate that energy that was captured by the plant into yourself. That's the most incredible form of metabolism, I think. Now I'm thinking these berries that are exposed to the sun, are traveling in and now somehow they're interacting with our microbiome liberating some potential energy maybe that is there. It's fascinating. I think that's an avenue that we probably know so little about. Now what you're saying, the cognitive beneficial effect of the brain, which is the most complex system on the planet, the brain, and this is going to segue into our regeneration because when you honor nature, and when we learn a little bit more about the microbiome, we honor how to build our own internal structures and follow the natural plants and get diversification and eat whole food and get away from highly processed, etc, etc. You're tapping into something that we can't possibly for a thousand lifetimes understand because it's so infinitely complex. We know more about the moon's surface than we know about the complexity of the microbiome in our soil. That's where I like the awe of this, and I love all of the research that you're getting into because it's the awe of nature and regeneration at its core, and Paul Hawken says this very, very clearly, it's promoting life. Regeneration is promoting life. You don't have to look at it as agriculture necessarily, you can look at it as everything you're doing. Are you extracting life? Are you promoting life? What are you doing, literally everything you're doing? Are you regenerating life in what you're doing? That's the beautiful thing, and I think the powerful thing about just berries. It's like how many more benefits?

Simon: Incredible, even in just following along on the berry, there are studies looking at anthocyanins, these are animal studies, and they've shown quite clearly that when you consume these anthocyanins, these polyphenol compounds, in mice, you see an increase in brain-derived neurotrophic factor, BDNF, which is like the fertilizer for your brain cells. You actually see increased growth of neurons, you see increased neural connections. So we're seeing neuroplasticity, which is just fascinating to sort of begin to understand. It is compound in a plant, which essentially is part of a plant's defensive system. That's what polyphenols are. They're a plant's response to predation or to UV exposure. I've read a really interesting theory about that because you could look at that and say, hang on, if that's an insecticide, or is part of a plant's defense system, shouldn't it be bad for an animal like us to be consuming? David Sinclair has done a bit of writing on this and talks about hormesis. His theory is that these compounds are inflammation. We see that organic food products tend to be richer in these because they have to sort of fend for themselves a bit more. They are fending for themselves a bit more, and they produce more of these compounds. David's theory is that these molecules are acting as information. Essentially, when you consume them, it tells your body that conditions are not perfect, times are tough, maybe there won't be food availability, and your body responds by activating these disease resistance longevity pathways. He describes some of this as this hormesis as you can think about it as if it doesn't kill you makes you stronger. So you have this low dose sort of exposure to these compounds. Sure, if you would have like a crazy amount of them, it could be harmful, but in a low dose, it actually makes your body more resistant to disease, so I thought that was neat.



[00:38:33] Vuori Ad

Darin: You know, one of the best things we can do right now is focus on our fitness, on our health. We need to move our bodies. We need to get outside even when it's cold. So I want to introduce you to another amazing company that I love, Vuori. They are active wear working on sustainability, just making great clothes. And Vuori, they're making sure that we are in comfort. I don't know about you, but clothes have to feel comfortable. They have to feel good on my body. And I love the way I feel in these clothes. This company has such a strong focus on the ethical manufacturing and sustainability, so that we can be comforted in knowing that we're supporting a brand that's making these positive changes in an industry that is really horrible. Literally, the fashion industry is the second largest promoter of pollution. So supporting companies that are changing things and not destroying the planet is absolutely what we need to do. So high quality performance apparel is designed to be versatile. I'm such a huge fan. Their shorts are so comfortable to run around in to get my workouts in, then I just stay in them all day because it just feels good on my body. So coming up into this holiday season, I can't believe 2021 has come this far. This is a great gift idea for anyone you love. So gift yourself this incredible treat. You get 20% off your order. You can head to vuori.com/darin. That's V-U-O-R-I dot com forward slash darin, D-A-R-I-N.

[00:40:44] Third Part of the Interview

Darin: You've been fascinated in regeneration, regenerative ag quite a bit. You and I have talked a bit about that. Number one, how did you and why did you start getting into understanding and some of the policies and procedures are not also that clear around regeneration? It's almost like a word that people don't know. What does that actually mean? So tell me your thoughts.

[00:41:13] Simon's thoughts on regenerative agriculture

Simon: I started reading about regenerative agriculture because we need to find a better way to do things. We've turned planet earth into a giant farm, and industrial agriculture has come at great expense of greenhouse gas emissions, and we're warming the planet, biodiversity loss--

Darin: Crappy food.

Simon: Crappy food, ocean dead zones--

Darin: Toxins.

Simon: Algal blooms, the list goes on. It's quite a confronting topic once you start digging in to see what we have done in such a short period of time. So that was initially what sparked my interest in regenerative agriculture, is there a way to feed people that adopts a different mindset less about extraction, and simply looking at how many calories can we rip out of a piece of land. But a mindset that looks at feeding people in a way that is nourishing and health-promoting and at the same time is good for life on the planet and is hopefully putting more back into the environment than we're taking. There are many aspects of regenerative agriculture that I'm totally on board with. I think overall, the principles of regenerative agriculture, which you and I have spoken about stem back thousands of years ago are--



Darin: Kind of indigenous agriculture.

Simon: Indigenous, yes, so we should rebrand indigenous agriculture, but these are principles that have come from people who were stewards of the land. They were guardians of the land, not owners of the land, guardians, stewards, living in harmony with the environment. There's a lot to be learned just there, just in breaking that down because no matter what we want to call it, regenerative agriculture, organic, biodynamic, whatever it is, the label doesn't matter. What matters most is the mindset shift. Can we shift to a mindset where we are living in harmony with the life around us, and we are being the stewards that we need to be? Today, when I look at regenerative agriculture, the sort of business side of it from an optimistic point of view, I would like to think that regenerative agriculture will help recreate the food system that we all want to see. I have some concerns, I guess, around governance, particularly, I think some of the regenerative grazing claims are a little bit hyped to beyond the science. I just think we need to be careful about how we sort of proceed forward with solutions before we scale them up. If we do scale them up, I think we have to have the infrastructure in place to make sure that there is good governance, and also really good transparency. So if you pick something up off the shelf, and it's regenerative, that should be a certified product. We should really understand as consumers what that means. Recently in this kind of space, so I guess the lack of governance, and I don't want to be seen to be completely having a swipe at regenerative grazing. If there's a way of doing grazing that's better than then currently, I'm all for it. I just think we need to make sure that claims are substantiated. And there's a guy, Spencer, who is a geologist, Spencer Roberts, and there's a website called Regeneration International. It's a website that is a source to find regenerative beef and dairy products online. If you search regenerative ag culture, it's the first hit that comes up. You can register your farm with them and be listed on their website. He was interested in this and really went and participated in a sort of zoom community meeting. He asked them, what are the criteria to register and sign up? They didn't answer his question. They didn't want to answer his question. That was all he was able to do to ask that question at this stage that got him very curious about what is this whole regenerative agriculture about and how rigorously are they looking into what farms are doing? So his wife or partner has a big amount of land in North America here that her grandfather used to use as a dairy farm, and today is no longer operating. They thought, well, let's sign up. They called it The Happy Cow Regenerative Farm and signed up. He was quite shocked. He had full approval for this regenerative farm. He was listed on the website for over a 12-month period on the website, yet he never had any site visitations, any measurements, there were no measurements of carbon sequestration, of biodiversity, etc. I don't know the fine details of that or Regeneration International, but it does speak to the need, I believe, for governance if we're going to go around and use this term regenerative agriculture, and we're going to have people online talking about regenerative grazing, reverse climate change, then I think that we need to make sure that farms are accountable to a certain set of criteria that distinguishes that practice from traditional grazing methods, which we know are terrible for the environment. Then I think we should also just make it clear that regenerative agriculture is an umbrella term within that you have a bunch of different regenerative practices. For example, holistic grazing is one of a variety of regenerative practices. Then there are things like poly cropping and cover cropping and intercropping, for example, which Native Americans have used for eons of time. They have the, I believe it's called, the Three Sisters, you heard of that? What's that? Squash, corn, and beans, and you plant those together and



that's a sort of intercropping technique where they all work together. Something else that I think is important to touch on here is the amount of land we're currently using for food production, in many ways, is problematic. It is a large result of our overreliance on animal foods. Today, we use 50% of all habitable land for agriculture, and 83% of all that land used for our food production is for animal agriculture, be it for the animals themselves, or for growing the rows and rows of feed crops.

Darin: For them.

Simon: But listen to this statistic that will shock you. So 83% of all the land we use to grow food today is for animal agriculture. That only gives us 18% of our calories. Animal agriculture is the largest driver of deforestation. We have to hit the brakes on deforestation, and there is a bunch of land that needs to be regenerated and rewilded that we do not need to be extracting calories out of. You are seeing now very interestingly, we're starting to see a New Zealand actually. There is an incentive now to convert grasslands back to forests. You need that incentive because you can imagine that farmers own land, and it's their livelihood, they have to make money off of it. If we're wanting to convert areas of land that are now owned by people back to wild ecosystems, biodiverse areas, then the governments need to start to value carbon sequestration and biodiversity and pay people to do that. There was an interesting paper that came out just last year looking at exactly this and they're starting to see areas of land in New Zealand where it's now more profitable for the farmer to practice conservation than it is to practice the production of beef. They actually found that if they were to convert grasslands in New Zealand to forests just in doing that across their country, they would be able to sequester 10 to 19 times more than the entire country's annual greenhouse gas emissions. I think it's important to just highlight, we need to create more calories from less land, and not just look at land. We have this mindset of looking at all land as land that should produce calories for us. That's a very colonial kind of mindset. You often hear "marginal land," and there's nothing we can do on that land except for grass. Nothing else would grow. I'm sure you've probably heard that before. But that is looking at land through the lens of how many calories can we extract from that land. There's nothing marginal about that land to the ecosystem if you were to regenerate it to all of the animals that would come back and live in there and all of the plant species.

Darin: Again, we're only looking at through the lens of the calories that we're deciding on and that statistic 18% destroying the 83% of this land use and it's horrifying. I've been in the middle of nowhere, and you're seeing land stripped to put cattle on it. They're not valuing what is already there. Plus on top of it, especially in America, they're subsidizing it. So the damn taxes we pay, they're subsidizing this meat production.

Simon: There's a two fold problem there. They're subsidizing it, and we're not factoring in the cost of any of those externalities, the damage, the tearing down of the forests, the emission of all of the greenhouse gases.

Darin: It's hard for people to understand all of that, the regular person, it's like, yeah, of course, I want it. And that's where voting with your dollars and understanding this stuff, it's not easy to get. It's not easy to like, why the hell are we doing this stuff, but we have to expose it, talk about it so that we can have the knowledge to then do something differently and then focus on another solution. Just enlighten me for a second, if you had it your way,



you're the Surgeon General of the planet, in terms of this, what would be the first steps in regeneration process?

Simon: Freeing up land and practicing conservation.

[00:52:06] How to make better use of our land

Simon: There was a study done and this is hypothetical, I don't think this is going to happen, but let's just say for argument's sake, today, the world adopted a plant based diet. Again, this is theoretical. We would be able to free up land the size of the entire African continent, which is four times Australia, that could then be completely regenerated back to wild, biodiverse ecosystems that are drawing down carbon, promoting life. I think that the first most important thing when it comes to regeneration is shifting diets across the world to more plant based, which ultimately will mean we can produce more calories from less land. I think a big part of this conversation is not just how do we produce calories, but it's how can we produce those calories from less land so that we can carve off all of this land that we don't need to be using for food production. There's a statistic that kind of speaks to how much we've dominated the land in terms of life is today, only 4% of mammals are wild animals. This is the biomass, 36% of the biomass is humans, and 60% is livestock. We have literally turned this place into a farm, and we need to reduce our footprint. So, it would be shifting dietary patterns, and this is why when I'm explaining to someone about the power of shifting their own personal diet, it's not just about greenhouse gas emissions. You will absolutely lower the greenhouse gas footprint of your diet by moving to a more plant based diet dramatically. Also, your food will be coming from much less land, and if billions of people are doing that, that adds up and makes a huge difference. Step two would be looking at how we are then growing food. On that smaller part of land, are we working in harmony with nature? We need to go down these regenerative practice avenues. We need to incentivize farmers to explore this area, reward them through financial incentives for sequestering carbon for promoting biodiversity. When that food turns up on the shelf, not only is it healthy for the consumer, but we know that it's healthy for the environment, and we're sustaining life for future generations and ultimately, the food system that I'd love to see, Darin, is some form of labeling that shows me when I pick up that product off the shelf, I want to know not only how healthy is it for me. This can be broken down in a very simple way you can use, traffic lights systems, we know that they work really well. I want to know two things. How healthy is this for me, and how much impact did this have on the planet? I don't want it to be greenwashing. I want to know that there is governance in place that ensures that this is much more than marketing.

Darin: Yeah, the governance and the transparency. I've talked to some app developers where you can put barcodes on your product. Regardless of regulation, you can start doing it. Then really show where and how it was grown, who it impacted, all of these things along the way, and that's what we need to do as business owners and stuff too. There's so much to talk to you about but, dude, let's get you back because it's kind of the most important kind of pieces. I've been like restructuring my whole way. I'm looking at almost everything in life right now. That's the beautiful thing about the pandemic, I think, is the opportunity to just see the fragility of life and see the strength of life and creating these systems of promotion of life in all ways. I'm just grateful to have this conversation with you. Where can people find you? How can they continue to learn more? Obviously, your books coming out, you got stuff on your website.



Simon: So the book's out November 1st, The Proof is in the Plants.

Darin: Coming soon.

Simon: You can go to plantproof.com/book if you want to read more about that. You can find me at [plant_proof](#) on all the socials. You can tune in to The Plant Proof Podcast if you're not sick of my voice. I would love to continue the conversation at any time, mate. It's been an honor to be here. Hopefully, this has been interesting. Sometimes this can be a little overwhelming, I think, making changes to our diet and, taking on all these issues in the world. I think it's important to realize that getting started is the single most important thing. In order to solve these issues that you and I are talking about, we don't need a small number of people doing it perfectly. We need billions of people doing it imperfectly. So remove the judgment on yourself. Just find that level of commitment that works for you.

Darin: I love that. I don't like taking that stand of judging people if they're not eating plants or whatever. I think it's more of an invitation, and I appreciate that about you. I just want to say thanks for that.

Simon: Thank you, brother. Thank you so much for having me. I look forward to doing this soon. Hopefully, get you back out in Oz as well and get you back on my show.

Darin: Thanks, brother.

[00:57:43] Generic Outro

Darin: What a fantastic episode. So tell me, what is one thing you got out of today's conversation? If this episode struck a chord with you and you want to dive a little deeper into my other conversations with incredible guests, you can head over to my website, darinoliem.com for more episodes and in-depth articles. Keep diving my friends. Keep diving.