Rip Esselstyn:

Season Two of the Plant-Strong Podcast, as you know, has been centered on the theme the heart of a hero. Thankfully, even in the midst of our unforeseen global crisis, there are always those who go against the status quo and who are unafraid to wade into difficult and unchartered territory, in the hopes of finding solutions for our long-term health and making the path for the rest of us just a little bit easier to follow. Well, today's guests are some of my favorite heroes and yours, Adam Sud and Tara Kemp, a dream team in the plant-based movement.

Rip Esselstyn:

For the last several months, Adam, a repeat guest and a great friend of mine, along with Tara have been enveloped in a groundbreaking research and study into the far-reaching impacts that plant-based nutrition can have, an addiction and recovery, not just to help people stay sober, but in all facets of recovery, resilience, self-compassion, physical health and spirituality. Believe it or not, this study is the first of its kind and is backed and supported by an enthusiastic and reputable team of physicians and experts.

Rip Esselstyn:

This initial conversation took place last fall at my office when they were just starting down this path, and at the end of this interview, I have a live catch-up interview at my office with Adam to get caught up on their latest information and findings. If you're looking for a beacon of light for the future of the plantbased movement, look no further than Terra Kemp and Adam Sud. They call their study the Infinite Study which is wildly appropriate because these two have an infinite level of compassion, passion, commitment and dedication to helping people reconnect with their true selves and rediscover their selfworth.

Rip Esselstyn:

If you don't have your ticket for Plant-Stock 2020, what are you waiting for? We've got 15 presentations from the rock stars of the plant-based movement. We've partnered with a world-class video team to give each of you a front row seat to the tour of the farm inside and outside. Everybody will be getting a list of the meals for the weekend, along with the recipes and ingredients, so you can cook along with Ann, Jane and myself for breakfast, lunch and dinners. Know that each household ticket will allow you to view the whole weekend again and again and again. Know that partial proceeds are going to the Esselstyn Foundation, a 501(c)(3), doing really wonderful work to spread the good news about plants. Visit plantstock2020.com and sign up today.

Rip Esselstyn:

Here we are Season Two of the Plant-Strong Podcast and I've got Adam Sud and Tara Kemp here. We're going to talk about some exciting research that you guys are both deeply involved in, but before we get into that, groundbreaking research that you're doing, the first of its kind. I'd love to just talk a little bit about how I know both of you. I know both of you like different backgrounds. I'll start with Tara. Tara, you and I, I think if I'm not mistaken, we go back to Plant-Stock, going back to maybe 2012?

Tara Kemp:

I attended the first ever Plant-Stock and that was when we chatted. I went off. There were, I want to say maybe, like five people total who were under the age of 40 and I was one of them. That was when I

came up to you and asked you if you needed any help because I really wanted to volunteer. That's when I started writing for The Daily Beet and then The College Greens.

Rip Esselstyn:

You were there with a boyfriend at the time and then also one of your best girlfriends, right? It was three of you.

Tara Kemp:

Yeah and we dragged our parents along.

Rip Esselstyn:

Then, you guys became known as The College Greens. If I'm not mistaken, you did a little bit of an internship with Engine 2 and you even wrote a book.

Tara Kemp:

We did.

Rip Esselstyn: What was the book about?

Tara Kemp:

It was about helping kids to make the transition. It was for parents and kids to do together. The first section was a lot of scientific research and background for parents to understand why this was a healthy way for kids to eat and then the second section was recipes for kids and parents to make together and the third section was activities for kids to do like coloring or word searches or grocery store, scavenger hunts and things like that to help them enjoy the food.

Rip Esselstyn:

You guys did a really spectacular job on. It was really thorough. I think well, maybe what we should do is we should put a link to that book for people.

Tara Kemp:

At the time when we first made that, it was such a feat to have put that whole thing together. I remember we were all really proud of it. I haven't probably looked at it in like eight years.

Rip Esselstyn:

It really is spectacular.

Tara Kemp:

Amazing.

Rip Esselstyn:

Since The College Greens, you've gone on and you're now doing some really cool stuff in the plant-based space. Talk to me a little bit about what you're doing, but don't talk about the research you're doing, okay?

Tara Kemp:

Yeah. I have been very fortunate to work with a lot of different groups and work with a lot of the greats and the luminaries within the movement. I worked at the Physicians Committee for a few years with Neal Barnard. I worked at Forks Over Knives, and then, most recently with Mastering Diabetes with Robby Barbaro and Cyrus Khambatta, who I know that you recently had on the podcast as well and that's been amazing. Now, I'm doing my PhD at Northern Arizona University, and like you said, doing some research that we'll get into later, but I'm also doing some coaching and hosting retreats and that is amazing and so fun for me.

Rip Esselstyn: What are you getting your PhD?

Tara Kemp:

Psychosocial health which is under the umbrella of interdisciplinary health. Very fun stuff for me.

Rip Esselstyn: All right. Maybe we'll get it back into that in a little bit.

Tara Kemp:

If you need more explanation, I could go into that. Lots of great words.

Rip Esselstyn: Say that one more time, the whole thing.

Tara Kemp: Psychosocial health.

Rip Esselstyn: Psychosocial health which broken down means what exactly?

Tara Kemp:

It's the psychological and social aspects of your health. I'm doing a program that is this larger umbrella program of interdisciplinary health that brings together public health, psychology and sociology. I'm taking obviously a perspective of nutrition, but I'm really looking at the psychological and social aspects of our health, really the intrapersonal the relationship with yourself and interpersonal the relationships that you have with others.

Rip Esselstyn: All right. I like it. Now, Adam.

Yes, sir.

Rip Esselstyn:

You and I go back to 2010 when you came to an Engine 2 Immersion. For people that don't know, Adam was on Season One of the Plant-Strong Podcast. If you want to-

Tara Kemp:

Everyone, go listen to the episode, it's always worth your time. Adam's story is amazing.

Rip Esselstyn:

If you want to hear a deep dive, you can go there, but for those that don't know and are just joining us now, can you give us a Reader's Digest version of your journey through recovery and where are you when-

Adam Sud:

You and I met in 2010 when I attended, I think the first or second Engine 2 Immersion and I was over 300 pounds at the time, did not know that I was dealing with diabetes and heart disease. I was battling at the time a 10-year struggle with substance abuse and unfortunately reached a point to where I attempted suicide and ended up going into rehab where I was diagnosed with diabetes and heart disease and a bunch of psychological conditions and had to face the facts that I needed to do a lot of work on myself both inner work and outer work.

Adam Sud:

The outer work included a plant-based diet and the inner work involved a lot of self-love and selfacceptance, self-compassion work. As a result, I was able to not only reverse my chronic illnesses and lose nearly 200 pounds, but at the same time completely regain the experience of being alive and learning to love myself, how I show up every single day and love how I move through this world. It's just been an incredible journey.

Rip Esselstyn:

When did you get this idea for this research? What exactly is the research study that has never been done before that you are now going to talk about, but I want both you to talk about it, obviously.

Tara Kemp:

Well, this first for the question's going to be a funny answer for Adam.

Adam Sud:

This is really going to be fun because I was just thinking about this this morning. Interestingly enough, five years ago, I was living in Nepal. I was doing a session of yoga and I was the only person there, so it's me and this yogi and he asked me to project five years in the future. I'd never allowed myself to do that before. It was something that was terrifying for me as a person in early recovery at the time. I only had about a year sober, so I didn't like to look that far ahead, but I did. I got these flashes of being able to bring together the power plant-based nutrition, self-love and substance abuse recovery.

I went back to where I was living at the time and I wrote in a journal that I had that I'm going to prove that there is a powerful connection between plant-based nutrition and addiction recovery, but I'm not ready yet. That's what I wrote and I put the book away because I knew I wasn't ready at the time and I was going to give myself the opportunity to create an environment for myself where I was confident that I could do it. Then last year, the opportunity came about and I found a treatment center willing to do this research study that we'll talk about. Amazingly, at the exact same time, Tara started her PhD work at NAU and after-

Rip Esselstyn: Which dovetails then completely?

Adam Sud:

Yeah.

Tara Kemp:

Yeah.

Adam Sud:

I didn't know, Tara at the time when I was living in Nepal. We met about a year later.

Tara Kemp:

That was only a year after Nepal that we met?

Adam Sud:

Yeah.

Tara Kemp:

Wow. Cool.

Adam Sud:

Or two years, something like that. I just knew that Tara had to be involved. Amazingly, she had the opportunity to do it. We're going to start the study this month which is five years exactly when I did that session with the yoga instructor.

Rip Esselstyn: That's a little cosmic right there.

Tara Kemp: Oh, man.

Adam Sud: Pretty incredible. Rip Esselstyn:

Wow.

Tara Kemp:

Everything with this study has been pretty divine and coming together.

Adam Sud:

There's been a lot of amazing energy behind this, just the incredible people and passion and amazing you could call them coincidences that have fallen into place around this study, which we'll talk about.

Rip Esselstyn: All right. Well, why don't we talk about the study?

Adam Sud: Yeah, let's do it.

Rip Esselstyn: What is it?

Adam Sud:

We're calling it the Infinite Study. We call it the Infinite Study simply because the treatment center where we're running the research study is called Infinite Recovery. Tara actually came up with an amazing anagram for but what we're wanting to do is we want to investigate the effects that nutrition has on early addiction recovery outcomes. When we I started my recovery, I noticed a profound change in myself as a result of not only addressing how I move to the world in regards to self-love and self-acceptance, but the profound impact that food had on my ability to show up for myself.

Adam Sud:

We started to design the research study and we came to understand that there's never been any research done on early addiction recovery outcomes and any diet well whatsoever. If you think about it-

Rip Esselstyn:

Why do you think that is?

Tara Kemp:

It was so surprising to both of us as we were starting to dig into the literature and I was looking for, "Okay, what has been done before and how can we do it differently or build on it?" It was like there is a foundation to an extent. We know that, for instance, food plays a role when people are initially in recovery, that it's something that they can structure their day around because in the past, when they were in the depth of the addiction, their day was structured around, "How am I going to get the drug? Where am I going to get drug? When am I going to use?" etcetera.

Tara Kemp:

Food is something that you eat at least three times a day and so it's another thing to structure your life around. It's also something that very often becomes a substitute for the drug because it's an easy thing that when you first haven't developed new coping mechanisms, it's something that you can utilize to numb or to get whatever you were needing. We know that that happens. We know that food does play a role, whether it's weight issues or just overeating or anything like that, that food plays a role during recovery and that it's an important part of it.

Tara Kemp:

We also know that when someone in recovery is taught about nutrition principles that their eating habits improve, but how does that actually affect their recovery from the addiction, we don't know. There's literally never been a study to show that. That was mind blowing to us because as Adam has said before, this is an affliction that affects the physical body so intensely, and most people when they enter addiction recovery, their body is in a state of malnourishment, whether that's the malnourished obese or whether that's truly being emaciated.

Tara Kemp:

If you're addicted to drugs, you're not taking care of your body and you're not thinking about nutrition in the large majority of cases and it affects your body's ability to assimilate nutrients and to do all sorts of things. The fact that we are looking at nutrition was just astounding to both of us.

Adam Sud:

I think it comes down to the fact that, and we talked about this, I think, on the Season One when I was on, is that we treat addiction from a dependency model, that we look at someone and say, "Okay, this person is addicted to heroin. Their problem is heroin. Let's create an environment where they can do anything other than heroin and call it success." I'm okay with the idea of saying, "We need to get this person off of heroin," that's obvious, but to say that heroin dependency as addiction, it's a misstep.

Adam Sud:

Because anybody in addiction recovery, myself included, when people told me drugs were my problem, I just had to say "I'm sorry. Drugs have never been my problem. They've been my solution to not knowing how to love myself and not knowing how to show up best for myself. I don't know how to live with myself or love myself properly. Drugs were my ability ..."

Rip Esselstyn:

So the problem then is not knowing how to love yourself?

Adam Sud:

That's a huge part of it, but what I'm saying is that they look at someone who's addicted to heroin and say, "Let's create an environment where they can do anything other than heroin and call it success," and I don't believe that that's success because that's not treating the underlying issue of how do I show up best and live my life in a way that allows me to move forward with positivity to where life is meaningful enough, that heroin, Adderall, cocaine, drugs in any form, sex, whatever is no longer necessary to escape a life that's become so painful.

Rip Esselstyn:

Is that the problem then?

Adam Sud:

I think so.

Tara Kemp:

Well, it's interesting because there is so much disjointedness within it because as Adam said, we treat it from a chemical dependency model today in most cases. There is the 12-Step Program, and though they know that there's this extra part of it, but so often, it's just like, "Are you using or are you not using?" and that sobriety. Whereas when you look at the way that it's actually documented, it's within the DSM-5 and things like that, we know that it is categorized as a mental and behavioral health issue. We know that the root is psychological and emotional, but then we treat it from this chemical dependency standpoint which doesn't really make sense.

Tara Kemp:

That's why for our study, we're looking at these mental and emotional and spiritual factors as well as the physical outcomes and our primary outcome is resilience because to us, that's what's really going to foster sobriety, is helping someone to be in a state where when life gets difficult, they have healthy coping mechanisms to help them get through that period without reverting back to the drug.

Rip Esselstyn:

Wow, this all sounds so incredible, and like you, I am actually shocked that a study like this has never been done before. Can you explain the actual study design and how you're going about doing it?

Tara Kemp:

Yes, absolutely. It's a randomized controlled trial which is the gold standard in research. For anyone who doesn't know, having randomization helps to make the research generalizable because it shows that there is no inherent bias in creating the different groups. When someone joins the study, they will be randomly assigned to either a treatment group or a control group.

Rip Esselstyn:

The control group then is going to be fed McDonald's and Burger King?

Tara Kemp:

No, they'll be eating basically what is already served at the recovery center which is actually very nutritious, honestly. This recovery center has a much higher standard of nutrition already in comparison to other recovery centers. If we were to be working with a different recovery center, we probably would see greater differences between the two groups which is a bad thing for the research but a great thing for the people involved and so we just have to take that humanistic love approach and be like, "Hey, this is great for them."

Tara Kemp:

One group will be eating the standard diet that is offered there and basically have no restrictions, no guidelines. It's just eat what is offered. Then, the treatment group will be eating a whole-food plant-based diet, a plant based diet that is-

Rip Esselstyn: A Plant-Strong diet.

Tara Kemp: Exactly. Plant-Strong all the way. Minimally processed, no oil, all of that.

Rip Esselstyn: So whole-food, plant-based, low-fat.

Adam Sud:

Low-fat.

Tara Kemp:

Low-fat for sure. Then, there's also a nutrition education component. The control group will be getting nutrition education that is just based on the standard American diet, the dietary guidelines offered by the US government, and then, the treatment group will be receiving nutrition education. This is once a week. It's like 60 to 90 minutes per session and they will be understanding the scientific foundations as well as the bigger picture perspective of a plant-based diet.

Rip Esselstyn:

How large is this group going to be?

Tara Kemp:

We're planning to have ideally 100 participants, but we'll see. It's rolling admission. This is going to be happening over the course of the next year or so. We'll basically have admission rolling for one year. Then if we reach 100 participants before that, we'll stop. Otherwise, we'll just do it for one year and see how many we get. We really don't know. There's no way to know yet how many people will sign up. We're planning to start recruiting in a week or two. We'll see from there. We'll get a good idea in the first month or so how many people that are coming through decide to sign up and join the study, but we're hoping that it will be a lot because the recovery center itself is very supportive and very excited and they really want to encourage as many people as possible to join.

Rip Esselstyn:

How many people are at this particular recovery center?

Adam Sud:

Right, so the current recovery center, there's two houses. One holds about 18 people, the other one holds 36 people because they just opened a new facility in Liberty Hill, which is this amazing 97-acre ranch. They will be transitioning everyone to the ranch facility and turning that current facility into their detox wing, but what I think is really exciting is that like Tara mentioned before is that we're not looking at sobriety as an outcome because this is a research in the early stages of recovery. We're looking at those mediating factors that go into creating a foundation for strong recovery.

Adam Sud:

How do these different diets impact your blood biomarkers? How does it change your gut microbiome? This is a microbiome study. How do those changes relate to validated scales of those factors of recovery that are so vital and so important, things like depression, anxiety, eating disorder, resiliency, spiritual growth, self-compassion? These are the factors that really strengthen one's ability to sit in those uncomfortable moments and have the resiliency to move through it with grace and not revert to old behaviors that are no longer serving them.

Rip Esselstyn:

So the thinking is that by transitioning to a whole-food Plant-Strong diet, because you have a stronger microbiome, because you're feeling like a jillion box, because you have greater mental clarity, all these things, you'll have greater resiliency to get through the tough times and it's going to take an early recovery?

Adam Sud:

It's more than that. Also, there's a subconscious understanding that when you sit down to a plate of food that you know is healing your body, that that in and of itself can be an affirmation of recovery, that can be an incredible basis of self-efficacy. That can be a person's statement three times a day that, "Today is about being comfortable with being uncomfortable. Today is about how do I show up and say, 'I'm worthy of this, even though for the longest time I felt I wasn't. Today, I am and I'm going to live in that space,'" and then also know that the nutrition that you're putting in your body is creating an environment within yourself to make those shifts and to create the known the new neural pathways that allow you to be, like I said, resilient and being comfortable being uncomfortable which is going to be such a huge part of an individual's life for the first year of recovery.

Rip Esselstyn: So it's several fold deep?

Adam Sud:

Yeah.

Rip Esselstyn:

One of the things that I always remember that I love about going back to probably 2016 or '15 when you first gave a talk at one of our immersions was how that by you eating these whole nutritious wholesome plant-based foods three times a day, three times a day you were basically telling yourself that, "I'm worthy. I deserve this. I love myself." It's amazing how that little act consistently, meal after meal after meal, day after day, then has an exponential effect.

Tara Kemp:

Exactly. Every action that we take sends a message to ourselves. When you're feeding yourself those nutritious foods, you are sending yourself that message that, "I am worthy of these things. I am someone who takes care of myself. I am someone who values my body and my health and my nutrition." It's a cyclical thing as well because as someone starts to experience that mental clarity as someone experiences the understanding of, "Oh, I know how to take care of myself," as someone starts to drop weight, sees their cholesterol lowering, things like that, that also in turn breeds more self-esteem and makes them want to continue.

Tara Kemp:

Obviously, we don't know if these things are definitely going to happen. That's why we're doing the research. We can look at to Adam's story and see how it has affected him. We can think about ourselves and how this dietary approach has affected us each in such amazing ways, but that's why we're looking at all these different factors and it will be interesting. It will be fun. Even from the spiritual perspective, as someone who's learning about a plant-based diet and their understanding, "Oh, food is not just between me and the food. It's not just me in the calories or me in the nutrients. It's also this bigger picture perspective of how it affects the environment. It's an extension of a value system and it helps to build that sense of connection, not only with yourself, but with the world around you."

Tara Kemp:

A sense of disconnection is a core root of addiction. As someone is building that sense of connection and they're showing up for the world in a way that feels good to them, in a way that they're proud of, in a way that they feel connected to that greater whole, we're also hoping that that can facilitate resilience and recovery.

Adam Sud:

That's exactly what I was about to talk about.

Rip Esselstyn:

Beautifully said.

Adam Sud:

Exactly what I was about to talk about because if you were to really look at a person who's in the troughs of addiction and really struggling, if you could ask them to honestly tell you how they felt and I'll talk from my personal experience, they feel broken, forgotten and unacceptable to the world because they believe that they're doing their best and they can't get a handle on things. They must be the flaw in the system. Because they're a flaw, no one wants them around, with makes them feel forgotten, which it's a crippling experience and you also feel unacceptable to others, to the world around.

Adam Sud:

You're not only not of service, you're a detriment to the greater goings on that was once incredibly meaningful to you, a connection that meant so much. What I really love about what a plant-based diet did for me was that it completely shattered that belief because I believe I was broken that's why I could never do well, but by adopting a plant based diet, I saw all these things that I believe were a personal flaw in me start to reverse which made me understand that I am not broken, that I am worthy of reconnecting to those truly meaningful bonds in life that hadn't forgotten me, I had forgotten how to connect to them and that the fact is that they at no point never wanted me to be a part of it. I had just simply forgotten how to be a part of it.

Adam Sud:

Food was that avenue that allowed me to relearn and rediscover, sort of remember, that's what I like to say so much that recovery is not a transformation to a new version of yourself, it's a practice in remembering who you've always been before the world got its hands on you. Food allowed that environment for me in order to learn those things and relearn those things that I had forgotten.

Rip Esselstyn:

Boy, you guys are so impressive. I'm just sitting here going, "Wow, this is the next generation." Just like coming up through all the plants. Do you want to say something?

Tara Kemp:

I was just going to say, Adam and I, one of the beautiful things about getting to do this research together, it just feels like such a beautiful collaboration because since the first time that we met, we just have this shared perspective on these things about this human condition, about the process of growth, and even though Adam has history with addiction, I've just always felt that his story is just a human story. This research addiction is not just going to have implications for the world of addiction recovery.

Tara Kemp:

It will have implications for us as human beings because we're all going through the process of finding acceptance with the parts of ourselves that feel unacceptable to the world and that we feel shame or self-criticism for and learning to build healthy coping mechanisms to deal with things when life gets difficult and learning how to show up for ourselves and make peace and have a peaceful, beautiful inner world. It's all about that relationship with ourselves that then as we build and strengthen enables us to show up even more fully for the world. To me, that's addiction recovery, but it's such a good microcosm for what it's like to be human in this world in general.

Adam Sud:

I really like what you talked about when we first started talking about this. You said what you find so fascinating about addiction recovery is that it forces an individual to do the inner work today that every human being ends up needing to do at some point because with someone struggling with substance abuse, tomorrow is very much so not guaranteed. I know that that's a fact for everybody, but it's much more extreme in that situation. Right now, they want us to accept that," I am addicted to Adderall because I'm an addict," or, "I'm addicted to this because I'm an addict," or, "I'm suicidal because I'm mentally ill or depressed because I'm mentally ill."

Adam Sud:

I'm not a fan of that way of thinking that when you really look at the situation that's occurring, a person is an addict because they're a human in pain, a person is suicidal because they're a human in pain and a person is depressed because they're a human in pain. When we can stop trying to define people by what they struggle with, maybe we can start to see that they just need someone to listen to their needs. Then, we can start to say, "Oh, your needs make sense. Your pain makes sense." Then, we can stop this dependency model focus and we can start to look at the human and how do we best serve a human in recovery.

Adam Sud:

Food is a part of how a human exists, so let's investigate how to best serve that person in regards to food, so that their recovery can start to reconnect them to what's truly meaningful, so that the pain becomes less and less and less and they start to feel that joy and that self-love and be able to be in pain and be okay with it.

Rip Esselstyn:

As Adam says, "Food is how a human exists, so let's investigate how to best serve that person in regards to the food they eat." The same is true for your pet and thanks to the work of our partner Wild Earth. They are serving the needs of our dogs in the best way possible. Wild Earth Dog Food is packed with clean protein sources, high-quality prebiotics and dietary fibers, all to ensure a healthy gut for your pup. No junk meat and no fillers here, just real food sources for your dog's health and wellbeing. Scroll down to view the show notes or visit plantstrongpodcast.com and click on the Wild Earth banner to claim your exclusive offer for up to 50% off of your dog food purchase.

Rip Esselstyn:

Who are some of the other people that you've brought in to be part of this research study?

Adam Sud: Amazingly, we have quite an incredible team.

Tara Kemp: The best team ever.

Adam Sud: The best team ever. Tara is the lead investigator.

Rip Esselstyn: For people that don't know, what does that mean exactly?

Tara Kemp:

That basically means that I developed the study protocol obviously with the help of my advisors and other mentors and people on our team, but I developed the research, design and protocol. As we are gathering the data, I am the person who is overseeing that and making sure that it's all coming in as needed. Then once we are starting to really have that data gathered, I will be analyzing it, putting it together. I'll be the lead writer on all of the manuscripts and things like that. I'll be the one that is taking that data and turning it into the narrative that we want to share with the world.

Adam Sud:

We have Drs. Dean and Ayesha Sherzai.

Rip Esselstyn: Who are they and why are they important?

Adam Sud: Whoa, so funny enough, Tara and I-

Rip Esselstyn: They were on the First Season of the Plant-Strong Podcast.

Adam Sud:

They were. For the listeners who are not aware of Dean and Ayesha Sherzai, in my opinion and I know Tara feels the same way, in a list of top humans on the planet, they are among them. They are some of the world's leading neuroscientists. They're the authors of The Alzheimer's Solution. They run the Healthy Minds. They have a nonprofit called Healthy Minds Initiative. They do the brain health, is it called the Brain Health Clinic at Loma Linda University?

Tara Kemp:

Yeah, I forget the exact name, but they have a brain health-

Rip Esselstyn:

I think it's Alzheimer's Prevention and Brain Health, co-directors at Loma Linda.

Adam Sud:

They're the leading authority on understanding of how lifestyle impacts cognitive function through the aging process. Their understanding of how nutrition plays a role in cognitive decline and cognitive repair is bar none. I'd met them at Plant-Stock, not this year, but last year. That's when I was first starting to think about the study and I walked up to them and introduced myself and we hit it off really well. I asked them, I said, " In doing your research, are you aware of any studies that show the benefit of nutrition on addiction recovery?" I remember Dean's response like it was yesterday, he goes, "Unfortunately, there is no research showing any benefit of nutrition on addiction recovery outcomes because it's never been studied."

Rip Esselstyn:

Because it's never ... Those last five words are very important.

Adam Sud:

Very important. I told him that that was something I was getting ready to start doing. I asked him if he'd be willing to share any of his research, just on cognitive function in nutrition and their response was, "Absolutely, we're going to help you 100%." They created a Google Drive. They sent me all of their research. I was consulting with them in the beginning just for help. I remember Tara and I were talking like, "You know what? Maybe we should ask them if they would like to be coauthors on the study." I got on a call with them. They've been just amazing. We were on video calls constantly trying to create the best design and they were so helpful.

Adam Sud:

I said, "Listen, I really appreciate you. Tara and I really appreciate the consulting that you guys are doing with us and helping us, but do you have any interest in coauthoring the paper?" Their response was, "Absolutely. This is something that's so important." I asked them, I said, "What can I offer you in order to make this happen?" He said, "You don't have to do anything. We're on your team." They have just been the most incredible support for us. It's really elevated this study to a completely different level because of the steam and the recognition that their names carry.

Rip Esselstyn:

Congratulations. That's fantastic.

Tara Kemp:

It's incredible.

Rip Esselstyn:

I wonder, with the Sherzais, it's like two and a half, three years ago, never even heard of the Sherzais and now all of a sudden, especially if you're in the plant-based world, you cannot move without seeing them somewhere.

Adam Sud:

Especially because I think Ayesha has been on Dr. Oz like 10 times. To call them a force of nature would be an understatement.

Rip Esselstyn:

It's not just Dean and Ayesha. It's the whole family.

Tara Kemp:

Right.

Adam Sud:

The whole family. Alex and Sophie are just-

Tara Kemp:

The kids are incredible as well.

Adam Sud:

I look at them I'm like, "Ah, what a promise for the future, right?"

Rip Esselstyn:

So true. Their whole family mission is to reduce suffering. Every day they get up as Team Sherzai and they're doing such amazing work. Who else? Who else do you have-

Adam Sud:

We have a young doctor named Dr. Frank Cusumano who was doing his microbiome study, PhD work at Columbia University. Interestingly, I had just done an episode on a podcast called Plant Proof and we talked about the study. Then, he reached out to Tara and I via Instagram and was like, "Hey, listen, I saw you guys."

Tara Kemp:

Social media world come through.

Adam Sud:

"I see you guys are doing a study that involves microbiome. Do you have a microbiome specialist on the team?" Interestingly, we didn't at the time. It was something that we were-

Tara Kemp: We were searching.

Adam Sud: We were searching for one.

Tara Kemp:

We were searching for someone to be able to help us with that.

Rip Esselstyn: Everything coming together.

Adam Sud:

I was in Costa Rica at the time. I called Tara. I was like, "This is your language. You get on the phone. You talk to this Frank guy," who I've been following for a while on Instagram. She calls me back like an hour later and I thought she was crying at first, but she's laughing.

Tara Kemp:

He was very excited.

Adam Sud:

She was laughing. She was so excited. She's like, "He's so in. He's so in," and we're using the Wang Laboratory at Columbia University, which is the one of the most advanced microbiome labs in the world. He's plant based himself and his understanding and his passion for microbiome work is just so unbelievable.

Rip Esselstyn:

For people that don't know and let's keep this relatively brief, but what's the microbiome? Can you give me a quick answer on that?

Tara Kemp:

Yeah, sure. The microbiome is basically the microflora, the microorganisms that live in our gut. We are very early on the brink of understanding. Just as a scientific community in general, we are very early in the stages of really understanding what the effects of this microorganism, community that lives in our gut, how it affects our bodies and our minds, but we know that it does. We know that there's a huge connection to our weight, to our health overall, to how we assimilate nutrients to our brain health, to our mental health.

Rip Esselstyn:

Cravings?

Tara Kemp: Yes, to all of it.

As well as emotional health.

Tara Kemp:

Literally, it affects everything. We're taking fecal samples at various points to understand how the gut flora is changing based on the dietary protocol or not and really looking at how that then correlates to these other components that we're looking at. How does that affect the depression and anxiety scores? How does that affect weight and cholesterol? How does that affect all of these things? It's very exciting.

Rip Esselstyn:

Let's just say that we are comprised of 10 trillion cells, right? Your microbiome is comprised of 100 trillion, right?

Tara Kemp:

Right, 10 times more than that.

Rip Esselstyn:

10 times more. Do we have any idea on how quickly our microbiome starts to ...

Tara Kemp:

Very quickly.

Adam Sud:

Very fast.

Rip Esselstyn:

... transition when you-

Adam Sud:

The way that we're doing is day one, you do a fecal sample and day five, you do a fecal sample because it's that fast.

Tara Kemp:

We weren't even going to do day three, and then we were like, "Oh, well, let's just say day five just in case," but our initial plan was to do point zero and then day three, but we switched it to day five.

Rip Esselstyn:

Wow. I've even heard that the microbiome is considered like the lost organ. It is what connects basically our guts to our brains. Anyway-

Tara Kemp:

It's incredible.

Adam Sud:

If you think about the fact that in terms of physical and physical health, everything comes down to cellular mechanisms to some degree and the majority of cellular mechanisms that occur aren't us. There are this microbiome, how could it not have a profound impact on how we move through the world? I'm glad that it started to become a new field and avenue of research, but like Tara said, it's so new and it's really exciting because of how new it is.

Rip Esselstyn:

Let's look-

Tara Kemp:

Well, I just wanted to say one more thing which is going back to the research team, just to give a shout out to my advisor, Jay Sutliffe because he has been an incredible support in this process and such a good mentor to me. I took a leap in reaching out as an early PhD student to bring in a new study because that's not something that's typically done. Typically, PhD students will just support the work that's already being done at a university. For me to come in and say, "Hey, I have this new study idea that my friend wants to do with me." For him, it was a leap for him as well to say, "Okay, let's do this and we'll take it on together."

Tara Kemp:

He's been an incredible support and he is amazing in his own right in the plant-based research space or in the research space in general. I just wanted to include him in that team shout out because he has been so great.

Adam Sud:

There's been a lot of people that have also helped us. Dr. Elizabeth Winings has helped out really early on with really like, "How are we going to go about doing this? What do we need to look at?

Tara Kemp:

Of course. GG, our statistician. There's a whole team behind this study and we are just two voices here.

Rip Esselstyn:

Let's say that I'm at the Liberty Hill Recovery Center. Is that what it's called?

Adam Sud:

It's called The Ranch.

Rip Esselstyn:

The ranch. Let's say I'm at The Ranch and I get assigned to the control group that is not getting the plantbased meals. I guess what I'm wondering is, so you got these people, you got the two groups, are they going to be eating together? Are they eating separately? Because I could see this being very divisive within the community.

Tara Kemp:

That was a major concern of ours. We really-

We spent a lot of time going over how we're going to make this effective.

Tara Kemp:

We really didn't want people to feel more isolated in what they were doing.

Adam Sud:

Community is such a huge part of early recovery to feel connected and not feel separate, so this was something that we spent a lot of time going over. "How are we going to create an environment where they don't feel isolated, they don't feel divided?"

Rip Esselstyn:

How'd you do that?

Tara Kemp:

What we essentially decided to do is batch randomization. When people come in, it's still randomly done, but we will have groups at a time. Say, in one week five people sign up, all five of those people will be put into the same group. Then the next week, if six people sign up, all six of those people get put into a different group. There will always be two different groups of people who are going through the study at one time, but we don't want anyone to ever be alone in what they're doing.

Rip Esselstyn:

Then how does mealtime work? Are people eating together, they're going to have the standard American diet and then the plant-based people eating at the same tables, different tables?

Adam Sud:

Yeah, it's going to be all in the same area. It's going to be controlled, right? Individuals, let's say the treatment group, they would come in and be served their food and we do food photos. We know what they're eating, how much they're eating, when they're eating. Interestingly, we really don't see it as being like that much of a point of contention because you're not going to be alone, you're going to be with a group of people. It's a smaller than average size treatment facility where there's such a huge ... Every other thing that you do is all about connection and community. We don't really see it as being the one thing that's going to break that. I actually believe that we're going to see people being very supportive of it.

Tara Kemp:

We'll see what happens. In the future, it would be ideal to have two separate centers, one that is entirely doing one and another that's entirely doing the other, but we didn't have that opportunity and you just have to ...

Adam Sud: We don't have it yet.

Tara Kemp:

... work with what you have, but something that we didn't mention that I think is also an important part of the research design that is advantageous and just has been an awesome opportunity is that this recovery center is the full continuum of care. We are having people as soon as they exit detox, there'll be recruited to the study. If they start, they have about three weeks of inpatient where they live at the facility. It's basically a very entirely controlled environment. They are eating what they are being fed and we have the full control over what the menu is and how their day looks.

Tara Kemp:

Then, after that three week point, approximately, they have another seven weeks of the intervention and that is when they're an outpatient. They're still spending the majority of the day there, but they're eating breakfast and dinner outside of the facility, and then lunch, they pack themselves. They're eating on their own. We are still doing 24-hour dietary recalls to track what they've been eating and we're still running all of the measures in terms of physical, mental, emotional, spiritual health, but they're on their own.

Tara Kemp:

We've got the first three weeks of this controlled environment and then the next seven weeks of tracking, "Do they stick to it? Does this work?" I think that is really exciting to have both of those environments being tracked as they head into sober living.

Rip Esselstyn:

Right, so you obviously have the menus all figured out?

Adam Sud:

Yeah, we have.

Rip Esselstyn:

Rotating around the sweet potatoes, oatmeal and rice and beans?

Adam Sud:

Pretty much.

Tara Kemp:

It's actually a pretty diverse menu. I just finished putting it together the other day. We've got all sorts of different cuisines, all sorts of different ... It's good stuff.

Rip Esselstyn:

But you have it broken up like by what? Three week periods or a month or just weekly?

Adam Sud:

It's a four-week menu.

Tara Kemp: Yeah, it's a four-week. Rip Esselstyn: That they would rotate around?

Tara Kemp:

Yeah.

Adam Sud:

In fact-

Tara Kemp:

There's a different lunch and dinner every single day for four weeks.

Adam Sud:

You know Brenda Reed, she helps us with training the staff and helping us come up how we're going to feed. We very much based on the Engine 2 Immersion style of like you have individual ingredients that you put on the plate and you assemble food onto a plate rather than having being every day lasagna-

Tara Kemp:

Well, that was the initial plan, but now it's full recipes.

Rip Esselstyn:

Cool. What was that anagram, that cool anagram that you're telling me about earlier?

Tara Kemp:

Oh, man.

Adam Sud:

INFINITE is investigating nutrient dense food intervention to nourish treatment effects.

Rip Esselstyn:

That just rolls right off the tongue. Wow.

Rip Esselstyn:

You guys, I know you got an interview to get to. I just can't say how proud I am of you, Adam, of you, Tara, and the contributions that you guys are making in this space and then beyond this space. When I think about so many people that are as we just talked about, not happy for whatever reason, trying to find value trying to feel like they're doing an important work moving through this life and the number of people that are suffering from addictions to opioids and you name it, I don't think that this work that you're doing and I think the results are going to come from it could come at a better time. Thank you for being such courageous thought leaders and in making this come to fruition. It's huge.

Tara Kemp:

Thank you. The means the world.

Thank you. It really does.

Tara Kemp:

Your support in both of our lives, I know that we both value your place in our lives and we love seeing what you're doing and you're an inspiration to both of us so much.

Adam Sud:

Very much so. I wouldn't be alive without you, but for those who want to follow along with what we're doing, my nonprofit is funding the research and so you can go to the website, which is plantbasedforpositivechange.org. As the research is going on, we'll be posting ... Right now, we have a video that talks more about it in depth and you can follow along with what we're doing. If you want to make a donation to the nonprofit, you can as well. All the donations are going to go towards the research study.

Rip Esselstyn:

Wow. You guys. Thank you with that piece. Take my lead, piece, Engine 2. Keep your Plant-Strong. Adam lives about five minutes from my office. He was kind enough to zoom on over and get me caught up on where he and Tara are right now six months into their Infinite Study. Here you go. All right, I am here with Adam Sud. Adam, gosh, the last time that you and I were sitting at this table with Tara ...

Adam Sud:

That's right.

Rip Esselstyn:

... it was November 14, believe it or not. Last year. We were talking about the research study that you and Tara and the Sherzais and everybody who are embarking on. It's now at least six, seven months later, we're in the midst of COVID-19. I'd love to get an update on where you guys are in your research study. Can you give me just a quick 30-second encapsulation as far as what the research is?

Adam Sud:

We actually started the research study. It officially began January 1st of this year. We're in the seventh month of it right now. What the study is essentially investigating is the impact of nutrition and nutrition education on early addiction recovery outcomes. Amazingly, and we talked about this when we met earlier, this has never been investigated. They never investigated how nutrition impacts the mediating factors of early addiction recovery. Your mental health outcomes as well as your physical health outcomes in regards to strengthening those factors that create hopefully long term recovery.

Adam Sud:

The treatment diet is a plant-based diet. Then, we have nutrition education to support that diet and the control diet is what they're already serving, which is an elevated Western diet. It's meat, it's eggs, it's dairy. It's a huge reduction of refined processed foods, but again, it's a Western diet. We've created a nutrition education to support that protocol as well. Then, we look at how each of those impact various blood biomarkers, microbiome changes and how those changes relate to changes of measuring anxiety, depression, self-compassion, resiliency, spiritual healing, eating disorder, mania, obsessive compulsive

drug use, essentially, how does what you put into your body and your understanding of what it does for you, the self-efficacy that's gained from the knowledge of how food impacts your entire self, create a stronger foundation for which an individual can recover upon. That's a pretty incredible, incredible study.

Rip Esselstyn:

Well, it just gets me excited just hearing you like encapsulate all that in one fell swoop. Where are you now six, seven months in?

Adam Sud:

This is month seven and every single piece of data that we're capturing is completely novel, right? There's never been a study of any kind ever done on this exact scenario, right? No one knows what diet does for an individual in early addiction recovery in a treatment center. It's never been investigated. Even the control diet is completely novel data, right? It is a first of its kind research study, not just the plant-based diet, all of it. We have some early results back and what we've discovered is that in the 10week intervention, because it is a 10-week intervention, the first three to four weeks are within the hospital rehab setting, the following six to seven weeks are in sober living, is that the average individual is dropping significant cholesterol levels with a greater drop in the treatment group.

Adam Sud:

Triglyceride levels are dropping with a greater drop in the treatment group. The anxiety, depression, resiliency scales are doing better and everyone with a greater result in the treatment groups. We're seeing amazing qualitative data. We're capturing the actual data on biometrics, but we're also capturing the stories of how these people feel about the recovery they're experiencing. We've got people saying, "This is my first, my second, my third time in recovery, but this one's different," and that individual is speaking about being on a plant-based diet, that is allowing them to connect to something greater than themselves.

Adam Sud:

They feel a connection to nature. They feel a spiritual connection to themselves. They experience a mental clarity that they haven't experienced previously. Someone could say, well, it's their fourth time in recovery. We're also hearing that and people it's their first time in recovery. We're also hearing from people who this is their second time. It's a common thread that we're hearing from people on the treatment diet. We look at work with Dr. B about brain fog. What happens when you start to increase your fiber intake and how it repairs the blood brain barrier.

Adam Sud:

We're seeing it, but we're seeing it and how it plays out for someone who really is experiencing some dysregulation with their mental clarity and how that impacts our emotional health and how that can either make things more difficult or more empowered in recovery.

Rip Esselstyn:

You can't tell me that you're surprised by any of these results?

Adam Sud:

I'm not surprised, but at the same time, I'm so excited because we could make amazing assumptions based on what you and I have experienced, what we know has been shown through research, through epidemiological studies, through randomized controlled trials on various specific processes in the body. We could say, "It's going to do better. The plant-based diet is going to do better," but now we know. Now, it's not a guess, and not only that, now for the first time ever, we can say, "Look." The thing is everybody who's coming into the treatment, into rehab is seeing improved results because people typically enter very, very sick, either overfed and undernourished or underfed and undernourished, chemically dysregulated through substance abuse or through medication misuse. They're emotionally unstable.

Adam Sud:

Everybody for the first time is getting a sense of structure. They're getting a regular diet that is more nutrient dense, no matter which diet they get than what they were doing before. They're off of their destructive substances. Everyone is seeing an elevation in their overall wellbeing, but the treatment diet, the plant-based diet is doing better. I'm not surprised by it. Now, it can't be ... For the first time, we can say with confidence, "This is what is happening."

Rip Esselstyn:

Are you guys able to measure how much better it's doing?

Adam Sud:

Yes. We have validated scales of measuring every single outcome that we're looking at. Our primary outcome is resiliency. It's a scale called the Connor Davidson Resiliency Scale. It was specifically designed to measure the effectiveness of PTSD treatment. What it really is is how does whatever the treatment that you're using create a greater opportunity for the individual to confront a difficult situation and then move through it with positivity and grace and be able to make a greater future for themselves to where when that situation arises again, they have tools.

Adam Sud:

We're now seeing that diet isn't the only answer for it, but it creates an opportunity to have greater success. I'm just blown away that this study is finally coming together. We've been working on it for two years and then to see the data. The data is great and I love it, but what really gets me going, what really fills my heart is the qualitative stories. Somebody saying, "I felt like I couldn't recover. This is my fourth time and I felt broken. I felt like I'm just going to be a habitual rehab patient, constantly going in and out like the revolving door individual and now it's different. I feel a greater connection to myself. I feel a greater spiritual connection to how I move through the world. I feel a greater connection to the natural world around me."

Adam Sud:

It's so funny because an individual saying, "I never thought this would happen. I was convinced I was going to leave and eat pepperoni pizza, and now, I feel like for the first time, I don't worry about what I eat and then have it have a negative impact of how I view my body." There are people who have had issues with eating and how they felt about their body. Now, they have a loving relationship with what they put into their body and how it relates to the way that they feel about their body. Because one of the things that I know Tara and I are very passionate about is loving your body isn't so much what your body looks like. It's loving what your body does for you.

One of the things I find so empowering about a plant-based diet in recoveries that it very quickly gives you evidence that your body has never given up on you. It very quickly shows you that even in the worst of your moments, your body was like, "I'm going to fight like hell for you. Give me the environment to do it and you will be amazed and I will love you like you've never been loved before." That's what we're seeing so amazingly with the data, with the stories in the treatment diet.

Rip Esselstyn:

I love that, "Your body is never going to give up on you."

Adam Sud:

It never has.

Rip Esselstyn:

Right.

Adam Sud:

If ever, there's evidence of it. You take a very sick individual. You put them on a plant-based diet like we do at the retreats, and in three days, their entire biometrics are different. If that's not evidence that the body has been fighting for them since day one, I don't know what it is. It's like people think that their body is sick and you're trying to make it well. Your body is well and it's trying to fight the disease. This is absolute evidence of that. It's like your body has been sitting there and you give it this opportunity. You give it this diet. You create this environment. Then, you'll hear this voice from inside of you saying, "I've been waiting my whole life for this."

Adam Sud:

The stories are what really hits home for me because we could look at data all you want, I'm glad we're going to have it because academia, the research industry, they'll love it, but I want people to feel empowered. I want people to feel like they're learning to love themselves. I want people to feel like they're reconnecting to what makes life meaningful because that's what's going to allow them to have a life that they enjoy and to be okay with the ups and downs, to experience pain and discomfort and sadness and still love it and appreciate it, see it for what it is, this like recognition that we are capable of such amazing breath of emotion.

Adam Sud:

There's a saying from an amazing person and she says that, "Grief is as sacred as joy. It is the receipt of having loved."

Rip Esselstyn:

That's good.

Adam Sud:

If a diet can help people connect to that understanding, it's just unbelievable.

Rip Esselstyn:

Well, that's a great update on everything that's going on. Now, just to tease people to share a little bit. Is there any chance that we'll be seeing a book from you in the future? We can have you back on the podcast to talk about.

Adam Sud:

It is in the works right now. I'm working with a literary agent, an amazing literary agent who actually is Dr. B's literary agent and working with people-

Rip Esselstyn:

For people that haven't listened to that podcast yet, who is Dr. B?

Adam Sud:

Dr. Will Bulsiewicz wrote the book Fiber Fuel. It is maybe the most comprehensive and best written book on gut health that I've ever read. He has an amazing social media presence as well where he does amazing Instagram Lives and IGTVs and posts all the time. He's very dynamic. He's very intelligent and he has an amazing ability to present his knowledge in a way that is absorbed easily by every single person.

Rip Esselstyn:

If you haven't listened to that podcast, go back about four or five episodes. You'll enjoy it. We got a book coming down the pipe. We've got this study that is six months in, rolling along nicely. Anything else that you want to share with us that's extremely exciting that's going on in your life?

Adam Sud:

Just living every single day.

Rip Esselstyn:

Living life.

Adam Sud:

Living life. The study is taking up a lot of my time. The book is now something new that I'm really excited about. I'm working with Mastering Diabetes and we're doing that every single day.

Rip Esselstyn:

Adam Sud:

I'm not mistaken, you'll be making an appearance at Plant-Stock.

Oh, Yes, this shirt by the way. Yes, Plant-Stock.

Rip Esselstyn:

Plant-Stock 2020.

Adam Sud: Plant-Stock 2020, I can't wait. It's going to be great.

Rip Esselstyn:

Virtually brought to you from the Esselstyn Family Farm.

Adam Sud:

Absolutely. I'm excited about it. It's new ground, so we'll see.

Rip Esselstyn:

Exactly. These two are going to infinity and beyond to help people come out the other side of addiction and recovery well beyond just sobriety. If you're struggling, know that you are not unwanted and you are not forgotten. You are a whole person. Through the work of heroes like Tara and Adam, it is our hope that the path to rediscovering your wholeness starts with a whole-food Plant-Strong diet. To learn more, visit our show notes at plantstrongpodcast.com or plantbasedforpositivechange.org. We'll see you next week for another episode of the Plant-Strong Podcast.

Rip Esselstyn:

The Plant-Strong Podcast team includes Laura Kortowich, Ami Mackey Patrick Gavin, Wade Clark and Carrie Barrett. I want to thank my parents, Dr. Caldwell B. Esselstyn, Jr. and Ann Crile Esselstyn for creating a legacy that will be carried on for generations and being willing to go against the current and trudge upstream to the causation. We are all better for it.