

**Deep Nutrition with Dr. Cate Shanaha  
PMR #148**

January 16, 2017

Tony Federico: Hey, Paleo Nation. I'm Tony Federico and you're listening to Paleo Magazine Radio, the official podcast of the original Paleo Lifestyle Publications.

On the show, we've talked to many people who've dealt with serious health conditions and many of them have been frustrated or stymied by the conventional medical system and the care they've received from doctors. What happens if you are the patient and the doctor? This is the situation Dr. Cate Shanahan found herself in when she experienced the mysterious and undiagnosable pain in her knee that made it difficult for her to walk and almost cost her job. After trying multiple treatments and experiencing numerous dead-ends, she came across a book called Spontaneous Healing by Dr. Andrew Weil which, in her word, opened a crack in the darkness.

In Spontaneous Healing, Dr. Cate learned about the significance of Omega-3 fatty acids and it set on a path to uncover the dark calories that have infiltrated our food supply. Along the way, she also learned about traditional fats and how an ancestral diet in general can provide a way out of many modern diseases. She was inspired to write her ideas down and these notes provided the basis for her best-selling book Deep Nutrition that she wrote along with her husband Luke. Deep Nutrition was originally released back in 2008 and since then Dr. Cate has been busy building her medical practice, speaking at conferences across the country, and working as a dietary consultant for the LA Lakers.

Obviously, she's learned a lot in the process and is now taking those lessons and using them to revise, update, and expand her book. The updated version Deep Nutrition is now available. In on today's show, Dr. Cate and I discussed the new book as well as the dangers of intergenerational malnutrition, the superfoods she used to help Kobe Bryant recover 100% faster from an ankle injury, what oxidative stress is the ultimate disease maker, how free radicals can create an explosion of inflammation in the body, what good fats taste better, the right questions to ask when you go to a restaurant, and how she gets professional basketball players to eat healthy.

Before we get started, I want to thank our episodes sponsor, Healthy Human created to always be by your side and designed with one mission in mind. Healthy Human is here to help you drink more safely.

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Tony Federico: Healthy Human products are available in stores nationwide as well as on their website [healthyhumanlife.com](http://healthyhumanlife.com). You can also check out their full page ad in the current issue of Paleo Magazine.

All right, Paleo Nation, it's time to go deep. Paleo Magazine Radio starts now.

Hey, everybody. Welcome to another episode of Paleo Magazine Radio. I'm here with Dr. Cate Shanahan, author of Deep Nutrition which is about to be re-released with brand new information, new content, more resources, and more good stuff. Dr. Cate, welcome to the show.

Dr. Cate S.: Hi, Tony. Thanks for bringing me on.

Tony Federico: I'm sure many of our listeners are familiar with your work. They may have read the original version of Deep Nutrition. They may have read your second book, Food Rules, and I imagine they're excited to hear that Deep Nutrition going to be re-released. Before we get into that, I like for anyone who hasn't heard about you before to get an opportunity to get to know you. If you don't mind, maybe tell us a little bit about your background and how you got into nutrition and food and health in the way that you did.

Dr. Cate S.: Sure. I'm a Family Medicine physician. In 2002, I had a mysterious medical problem. It was really serious. I actually couldn't walk for over a year. It was really devastating. It made it hard to work. I almost lost my job because my boss was a real meanie. Long story short, after being introduced to Omega-3 fats by Andrew Weil, I realized that I had mislearned a lot of nutrition in medical school. That had made me sick ultimately. Actually, it had not just made me sick but all my family members who have medical problems, it was also making them sick. I felt like that's terrible. I need to do something about this. I need to understand a little bit more about why it's the way it is in terms of fats.

It was really the medical thinking on fats that I pinpointed as that's where medicine went wrong back in the 1950s. A lot of the chronic diseases that people are suffering from now, I mean probably all of them are related to that switch because what happened was we changed our diet based on some dietary recommendations that were not well thought-out at all.

Tony Federico: Absolutely.

Dr. Cate S.: I actually started writing a book back, way back in 2004. I remember I was going to call it the amazing and simple diet and I was sitting and I lived in Hawaii at the time. I started writing this in this beautiful location. I wish you could see it and I'm there now, the South Coast of Kauai and one of [the pals 00:06:25] and I was just like sandy beaches, I had a couple days off a week and more free time because I couldn't walk yet at that point in time.

That's when I started writing. Ultimately, it took us about four or five years to finish but it ended up being a lot bigger and not just the amazing and simple diet. It was going to be just about the benefits of cutting down on your carbs and cutting out these vegetable oils. We got into a lot more and it really had changed everything about the way I practice medicine. I was inspired to want to come back to the mainland actually to try to publicize it more, to work more on a focused targeted environment where I would be part of a larger medical group that would enable me to reach out to more patients.

Then that didn't work so my husband Luke, who's kind of really smart, and he came came up with the idea that if you want to make nutrition sexy, if you want make people care about diet and stuff, you really have to get sports involved because we are a team sport country. He reached out to the Los Angeles Lakers and ultimately we got connected with them. They love the concepts. They loved the possibility that just changing diet could help support, it was actually the trainers I work with and they're both are of the philosophy that you can't out-train a bad diet. In other words, no matter how good the training is, if your diet is sucky, your training is not going to be able to help promote the kind of healing and performance that they wanted out of their players. We changed everything about the way they eat.

Tony Federico: I definitely want to get into that but I'm still stuck on what was going on with you and your health. Obviously, not being able to walk is a big deal and highly concerning. What ended up being the thing that was wrong? What was going on?

Dr. Cate S.: It was kind of mysterious. I mean I figured out myself just a hypothesis that I had a virus in my knee but I went to like six different doctors. I even had surgery and biopsies and stuff, and nobody came up with much of any kind of explanation. It wasn't until I changed my diet that I started to get better. It took about a year to fully recover.

Tony Federico: Is it more pain in the knee or just an overall inability to move?

Dr. Cate S.: It was swelling in my knee and then pain in my entire leg and then weakness and fevers if I continued to walk on it. It behaved like an infected joint and infected by a virus because if it was bacteria it would've been more aggressive. That's what I figured. I figure the reason I got better was because I improved my immune system health. It did take a while but infections are, viral infections are often really tough to eradicate because viruses have been around on this planet for longer than we have and they are very smart. They've been around on this planet for longer than immune systems have been around.

Tony Federico: They got our number.

Dr. Cate S.: Yeah.

Tony Federico: That's very strange and obviously I'm sure that experiencing something like that, you would want to take a look at your life. I think a lot of people would maybe just go the standard medical route. You being a physician, why didn't you do that? What didn't you go to medication and kind of [crosstalk 00:10:01]?

Dr. Cate S.: I started with that. It's only because it failed and also because I had this long-standing love of biochemistry and fantasy that if I went to medical school I would learn how to get to the bottom of lots of medical problems. Once it was clear that the medical system was a dead end, I really just dove into biochemistry after finding a little crack and the way out of where I was trapped, the way out of the darkness was that little crack. Thanks to Andrew Weil who wrote a book called Spontaneous Healing where he mentioned Omega-3 fats which at that time, this was 2002 before every first grader knows what Omega-3 fats were. I had never heard of them. I didn't know what they were. The fact that he was saying, "These are fats that the body needs," absolutely blew my mind. Even though I couldn't walk, I wanted to get a biochemistry book so badly that I booked a flight to Oahu and wheelchair around the airport, crutches and everything, went to the medical library. I came back with my \$150 investment and read it cover-to-cover basically.

Tony Federico: What did you see in that text and in other studies that confirmed what you intuited with that little crack that Omega-3 has opened up?

Dr. Cate S.: That what I learned was that because we strayed away from natural fats, we had invented these new fats these new so-called healthy fats, essentially we invented them, I mean the vegetable oils. Vegetable oils are made from food so we didn't invent soy and corn and so on that's what vegetable oil is made out of but we process them in ways that could not have been possible before the industrial era. I didn't know this. We don't learn about this in medical school but it's a key factor. I knew it was a key factor because when I started looking at labels, I realized they were everywhere. It was in my salad dressing. It was in my healthy Lean Cuisine and my Marie Callender's and my butter, my popcorn, microwave popcorn.

It was everywhere and so ultimately I learned that this was half of our calories. Half of the average American's calories comes from vegetable oils and nobody was talking about it. That's why I started calling them dark calories because they're like these invisible things. Half of the calories that I was eating and that the average American is eating come from vegetable oil and no one is talking about it. That's why I call vegetable oil these dark calories because they're invisible to us. You can even watch cooking shows and people just talk about and add your oil now but they never specify.

I did some math and added up the percentages and it does look like, not counting desserts, breakfast, lunch, and dinner alone, the average American eater is going to get anywhere from 30 to 50% of their calories from these things. An article came out actually in 2011 that showed that our consumption of soy oil, was just focusing on soy oil which is one of the six vegetable oils, has gone up 1,000% in the past century, in the past hundred years. The person who wrote this article said, "This is the biggest change in human history of dietary impacts because it boils down to the biochemistry of these oils to understand what makes them so different."

Tony Federico: Obviously, I have some ideas but that's going to be my question to you is, we're eating a lot more of them, they're novel, but exactly, what is it specifically about them. I think at this day and age, certainly within paleo circles, people are like, "Yeah, we don't wanna eat those industrial seed

oils. We don't wanna eat the canola and the soy and the corn oils." People still might be a little unclear as to why.

Dr. Cate S.: Why? It's because if you get these out of your diet, that is the first most important step you can take towards better health. I'm going to say, I'm going to step on all of them, it's way more important than cutting out gluten. It's even more important than watching your carbohydrates. There's nothing more important than this because your body cannot work properly as long as you're eating these things because what they do on a chemical level is they promote something called oxidative stress.

Oxidative stress is the great disease maker. Every chronic disease out there, from Alzheimer's to autoimmune disorders to obesity to diabetes to heart attacks, has to do with oxidative stress. That is this underlying cause that I was really hoping I would find back in my fantasy days before I went to medical school. If you Google oxidative stress and any disease, any chronic disease, you're going to find that there is tons of research being done to show the connection. That's why I say it is the most important first step that you can take.

As much as a lot of people do have issues with celiac and gluten and dairy and so on, it's because their immune system is deranged from this stuff. They don't know, you don't know what your immune system would really be like until you've been off of this stuff and, of course, watching your carbon takes and eating a healthy balanced diet for a while, that enables your immune system to to really correct its mistakes because gluten intolerance, celiac disease are autoimmune disorders. That means your immune system is confused. It's making a mistake with the immune system as a learning system. It can recognize its errors, that's why a lot of kids outgrow allergies and a lot of people develop new allergies as life goes on because their immune system starts making mistakes.

Tony Federico: Now, with these particular types of fats, they're creating this oxidative stress. Another thing that people are totally aware of is their role in inflammation. How does that oxidative stress lead to inflammation?

Dr. Cate S.: Oxidative stress is the great disease maker because it disrupts chemical balance in your body. A lot of folks know about the Omega-3 and Omega-6 ratio but this has nothing to do with that. It's entirely different.

Tony Federico: It's not just the ratio. It's just something inherent to these fat specifically.

Dr. Cate S.: Right. What that is is that these fats are polyunsaturated fats. Polyunsaturated fats are very sensitive to damage by oxygen. That's why it's called oxidative stress.

Tony Federico: It makes sense.

Dr. Cate S.: Oxygen actually physically attacks the molecules and breaks them. It does so in such a way that it leads to a vicious cycle, what they call a free radical cascade which is a lot like a nuclear fission. I mean that's on a nuclear level. This is on a molecular level but we understand nuclear fission is that a reaction that generates a lot of byproducts really quickly, really fast, in fact is explosive. The free radical activity that occurs when

the fatty acids in vegetable oil start reacting with oxygen in an uncontrolled manner is just like that. It is like an explosive reaction. I'm liken it to eating radiation or eating radioactive food. You're damaging your body from the inside out.

Tony Federico: Obviously, we know that fats are essential part of cell membranes and that's where a lot of intercellular communication is taking place. Is that related to how the immune system is ultimately disrupted?

Dr. Cate S.: Absolutely. What happens is the function of the immune system cells is they're supposed to be able to recognize you from not you. That is their one job in life. When it's not you, then they have to make the decision, "Is this a good guy or a bad guy?" That's where good bacteria versus, I mean, probiotics versus the pathogenic bacteria in the gut come in. It is in the gut that most of this activity happens because the immune system in the gut sees more different proteins in a single day than the systemic immune system and the rest of your body and your bloodstream [in your life 00:18:57] see an entire lifetime. There's a lot more going on in the gut.

When you eat these vegetables and you have all these free radical cascades going on, it is literally like your immune system is trying to protect you against the enemy in the midst of massive so-called friendly fire. You're firing on your self and then the immune system's trying to distinguish enemy from friend, friend from foe, and you from not you. It makes mistakes and it ends up ultimately leading to the creation of antibodies that attack you instead of just attacking the bad guys. These antibodies are something that the immune system remembers. That's why when you get a vaccine, you are protected against that infection for either months or years. It's the same when it makes a mistake and starts, like for example, creating an antibody to gluten. It's going to remember the antibody for months or years so even though theoretically an ideal diet can help your immune system heal to the point that you're no longer celiac and actually some people have said this happens. It does take a long time a lot of patients in really being really good for a long time.

Tony Federico: We're kind of going through our list of things to maybe reduce or avoid completely instead of going, typically what I hear is grains, beans, dairy, and then the industrial seed oils. We really want to shift that around and move those industrial seed oils right up to the forefront of the things that we're really restricting or eliminating but then obviously that brings a question of eliminate them and replace them with what. I'm imagining that's going to be our traditional fats.

Dr. Cate S.: Yes, absolutely what you said. Getting rid of vegetable is like getting better sleep and regular exercise and meditating daily all rolled into one. There's really nothing better that you can do.

Tony Federico: Nice. It sounds a lot easier than meditating too.

Dr. Cate S.: Yeah, it is. The good news is that the alternative to these things, so if you were eating 30 to 50% of your calories, you have to know like, "Well, what are you gonna get instead?" The good news is that there's alternatives and there are the natural fats. They taste better. Butter and coconut oil and olive oil and actual oils, one way that you can tell is do

they have a flavor? Because the processing, the very same processing that makes them harmful to us strips them of the protective antioxidants and things that keep them from being inherently dangerous if we just, for example, eat corn or soy itself. It chemically removes those antioxidants and at the same time it changes the molecular shape so that it doesn't interact to the taste buds in the same way. That's why there flavorless. Most of them are nearly flavorless if you've ever noticed. You switch on, you start frying whatever, chicken in peanut oil or lard or something. It's going to taste, you're going to notice that it tastes a lot better.

Tony Federico: What would you say about peanut oil? Because that's something that you see from time to time and people, I would probably just be inclined to think that it's not too much different than soy oil or another legume-derived oil.

Dr. Cate S.: The reason I use it is because generally or it's a lot easier to find peanut oil that's been refined, bleached, and deodorized. It's really about refining, bleaching, and deodorizing stuff that happens in the factory that does all that damage. You could make corn and soy oil and even canola oil. You could make it so that it's actually a healthy oil. You wouldn't necessarily want to cook with it because that's going to promote oxidation and those fats are still fragile. They do at least have the antioxidants so they could handle a little bit of that. It is the refining, bleaching, and deodorizing that does it. Peanut oil is generally not refined, bleached, and deodorized. You could you could make any oil bad enough.

There's like these [laminare 00:22:58] forms of olive oil and the really cheap olive oil. That actually I don't recommend it because it's so past the first press. They have the first cold press and the second person and whatever, keeps going down the line. Eventually, they have to heat it, pressurize it, use solvents, and it becomes just as bad for you as all these other vegetables.

Tony Federico: It's not just switching to olive oil from corn. You still got to get the good stuff.

Dr. Cate S.: Exactly. That's right. You have to get the good olive oil. I said there was good news. The stuff tastes better, it's better for you.

Tony Federico: Right.

Dr. Cate S.: The bad news is it means you're not really going to be able to eat out without exposing [inaudible 00:23:41]. You have to be more careful when you eat out. You have to be that pain in the neck person. That's like, "Can you cook without this oil or that oil or whatever," because the restaurants, even the best restaurant, not McDonald, not the fast-food restaurants ...

Tony Federico: Hopefully people weren't thinking that when you said the best restaurants but you never know.

Dr. Cate S.: Right. Even the best restaurants though will still use this stuff and they'll tell you even that they're using olive oil because they're using a blend, a blend oil. That's like the new term for a crap in restaurants. What they do is they blend as little as 1% of olive oil with 99% of one of these other

things. Unless you taste it and it tastes like olive oil, you don't always know.

Tony Federico: This is going to be what they're frying foods in. This is going to be what they're using in their salad dressings. This is going to be pretty ubiquitous. Any foods that you would say, even if you're going out to eat or maybe safer bets because one of the things that I think about when I'm going out to eat is avoiding industrial seed oils. I try to get whole meats that are, for example, if I'm getting steak or broiled steak or something along those lines and just maybe a side of a potato or something like that, what would you say or maybe some tips or tricks for navigating a restaurant environment?

Dr. Cate S.: That's a really good question because it's so important. More Americans than ever are eating out and the amount that we eat out is humongous. I saw another statistics that the meal portion sizes are four times bigger than what they were just a generation or two ago. We're eating a lot out. What I do is I usually, if there's soup on the menu, I'll go for that because sometimes they might saute any vegetables in there and some vegetable oils but usually you can ask if they make their own stock, the soup bases are often cream bases so I look for that. I ask them if they can just cook fish or steak or whatever on the grill or griddle with butter or olive oil. I'll ask them specifically to do that. I've gotten to the point where I realized that if the waiter or waitress doesn't know, like you ask him like what's the cooking oil back there, if they don't know, almost 100% of the time, it's not good because the chef ...

Tony Federico: It's a sign.

Dr. Cate S.: Yeah. The chef is going to be pretty proud of the fact that he uses perfect olive oil and all the great stuff. We'll know that. You do have to ask for a lot of combinations. One of the most important ones is just asking for your salad to come out just with no dressing or an oil and vinegar. Let's just say that they, for example, use buttermilk with a buttermilk base or something like that.

Tony Federico: Nice. We know that we want to avoid those industrial seed oils. We know why they're bad for us and we have some strategies for avoiding them. Let's go and get back into your story. You're starting to feel better. You've made some changes to your diet. You're back to the mainland and you find yourself hooked up with the NBA team. How did that actually play out. How did the results of your initial, as you say, consultations, what training, I don't really know what that would look like if you're working with the NBA players on their diets.

Dr. Cate S.: What I did was I work with the trainers to figure out a strategy to get them to eat more of the stuff.

Tony Federico: Train the trainers.

Dr. Cate S.: Yeah. The trainers, actually Gary Vitti who had been at the Lakers for like 28 years at the time we contacted them, he's like a legend in NBA. Even though he's not really officially in management, he was in management so what he says goes. When he bought in after he wrote a book, he said, "Yeah, we gotta change what we're doing and we gotta kinda pump up our culinary, um, the offerings," because they did have a

chef on the facility who fortunately, we still have this chef. She was incredibly talented and so she was able to adopt this stuff really quickly.

Now, when they're at the facility, they practice. They come in before practice. They eat breakfast. They practice. They eat lunch very often. Then they go home and they're back on their own again. When they're on the road, we also feed them. We feed them on the airplane which used to be catered just by whatever restaurant. Now it's specifically catered with well-sourced meats and grass-fed, everything possible and organic. Then in the hotels, we give them a especially catered buffet. Even this year, we're expanding it to feed them after home games and we also do some more catering type stuff to get them at away games so that they have some food to eat there as well.

We've also really cut down on the use of protein powders. They were, because of the mindset of the trainers that I work with, some different, just go and Gary, they were already moving in that direction. We really cut down now and like almost, actually none of the players have them on a regular basis. We usually give them food. If you haven't worked with professional athletes, like to not use protein powders is almost like heresy.

Tony Federico: I was going to say what was the players response? How did they feel? What did they tell you? What were they saying to their coaches and trainers?

Dr. Cate S.: The main thing was that, "This food is delicious."

Tony Federico: Nice.

Dr. Cate S.: Like for the first year, I went down there and I introduced the program and they loved it. They signed up and we really tracked them really carefully. Actually even after injuries, I would call and have special foods delivered to the rooms. This happened when Kobe twisted his ankle and we got him bone stock and a lot more vegetables and really made sure to get crap out of his diet. He actually was back on the court playing in less than two weeks and that was a lot quicker actually by half than what they predicted he might be going back. Lots of other injuries, they come back faster from injuries.

Those guys who were really doing it where they're also cutting their carbs which is another kind of heresy in the [subpart 00:30:19] of the world. We don't have them do low carb or zero carb. We just have them cut back on their carb so they can make room for more actual real nutrition in the form of healthy fats and stuff and bone broth. Those guys pretty much universally will say that they have more energy in the second half and particularly the fourth quarter. They have more mental focus. It's really been everything we hoped it would be.

Tony Federico: That's awesome. They like the food. They thought they tasted good. They're recovering more quickly from their injuries. That sounds like a win-win-win. Any interest for maybe other teams who see this is a little competitive advantage they might want to get involved in?

Dr. Cate S.: Yeah, absolutely. The first year, the Warriors sniffed out what we're doing and started copying it. Now there's like at least four other teams

that are trying to do like the grass-fed and some of that stuff but I actually was barred from working with other teams because I'm not like just really a consultant for the Lakers. I'm actually on their training staff.

Tony Federico: That's cool. Good for you?

Dr. Cate S.: [inaudible 00:31:30] work for the enemy.

Tony Federico: They have to find their own doctor to help them get their diet straight.

Dr. Cate S.: They have to figure it out themselves [inaudible 00:31:38]

Tony Federico: Exactly. That's an awesome experience. For you, coming from a family practice, I'm sure that that must have been fun. Obviously, you wrote another book and that was Food Rules and now you've come back around to Deep Nutrition. What made you want to do a second version? What was the idea behind re-releasing it?

Dr. Cate S.: We've originally released it in 2009 so it's been a long time. There's just been so much fascinating resource that's come out that expands on all the arguments that we make. Like for example, vegetable oil is bad. We have a whole new chapter and they're called Brain Killer, why vegetable oil is your brain's worst enemy. We go over how it is involved in causing autism and close to or concussion damage, chronic traumatic encephalopathy, and Alzheimer's, and even just like on a day-to-day basis, energy fluctuations, memory problems, the kind of damage to the appetite centers in your brain that make you hungry all the time. It's just an amazing number of things that will improve in terms of brain function when you get it out of your diet.

Then lots of other stuff like one of the things that's like really controversial that we talk about that we've introduced and hopefully I want to discuss this more is the fact that, over generations, a bad diet particularly these vegetable oils and excessive sugar and malnutrition, it changes your DNA. Your DNA is always listening what's going on on outside world. DNA is like weather. The only thing that's constant about it is change. It is always, always changing. We are always evolving. There's been this really much more rapid evolution over the past three, four generations that we document in our book that shows that children are being born very prone to disease.

It's much more prone to diseases than parents ever before and not just diseases we diagnose at a doctor's office. You can look at the faces of some of these children who are in the more malnourished and more disadvantaged and you see changes in the facial structure deviating that has never occurred before in evolutionary history because this food is unnatural. We have never had to deal with unnatural food before. It's just not something that we've changed our diet and a lot of folks in the paleo movement talk about how we've added farming has been detrimental. The fact that we are now eating fake food is something that our DNA cannot cope with and never will. There's a lot to talk about how eventually we'll evolve to deal with a modern diet. No, we won't because we cannot, this is not something that DNA can handle.

Tony Federico: This is just bringing to mind something that I saw recently on Facebook and it's talking about seabirds accidentally eating plastic because they

think it's food. It would be like us saying, "Oh, we don't have to worry about plastic pollution. The seabirds will just evolve their way out of it." It's like, "You know what? We might actually just kill them and if you're dead you're not evolving."

Dr. Cate S.: Exactly.

Tony Federico: If you want to roll the dice on your own life and hope that you might be able to evolve your way out of a fake food diet.

Dr. Cate S.: It's a one way street, evolutionarily speaking, because it's not part of evolution. Our DNA has been in development, if you will, since the beginning of life on Earth. The DNA in your body is descended directly from the very first life forms that evolved, some say as long as two and a half, three billion years ago. There's a lot of intelligence in there. It's been able to deal with a lot of change but not this.

Tony Federico: Too much, too quickly, is what comes to mind.

Dr. Cate S.: That's why we say getting it out of your diet is really the most important. If you can only focus on one thing, if you're overwhelmed by different types of dietary changes, just look at vegetable oils and don't buy anything with them on the label.

Tony Federico: That's the thing. You got to read the label because you're not going to know just looking at the front of the package. The new book, obviously, it sounds like it's diving much more deeply, no pun intended, into these subjects. Any other kind of juicy tidbits maybe for someone who's read your previous version of Deep Nutrition and is thinking, "Well, if I already got the first one. I don't the second one."

Dr. Cate S.: We have a plan that's really well flushed out so we can tell you exactly where to start. It's not just for the people who do it themselves. It's also for their entire family. It's really helpful to have that information of how to bring it into, it's one thing to make decisions for yourselves, but how do you get your family on board as well. What is the easiest way to ease into this? Because I'm not going to lie to you. The truth is once you start looking for these vegetable oils and wanting to cut down on your carbs which is the other important step, you're not going to be able to do a lot of these convenience foods because that's what they're made out of. That's what agribusiness is selling us basically is vegetable oil and carbohydrate rich foods.

We have a plan in there for: What's the first step? What's the most important thing? What's the most important meal to start with? Then what do you shop for? How do you cook it and just how to conceptualize this? It's a habit change really. We try to break it down.

Tony Federico: I'm loving it. I love how we're really getting very specific as far as maybe the biggest lever that we can use to improve our health. I think if it works for NBA players, it's probably going to work for office workers and weekend Warriors and everyone who's not necessarily demanding that type of performance but who wants more well-being and longevity and for your health care issues. That's something that I think we could all benefit from.

Dr. Cate S.: Absolutely. I have so many patient stories about amazing transformations that have taken place once they've gotten this stuff out of their lives or their children's.

Tony Federico: Good stuff. Dr. Cate, thank you so much for joining us. Is there anything else you'd like to say before we go?

Dr. Cate S.: Just one thing and that is this isn't just about obviously your listeners. It's about the families and the friends of your listeners. What I like to do is just leave you with one thought for your family and friends and that is like just bringing up the idea that if you know anybody who is planning on having a baby or is currently pregnant or has a newborn, really getting vegetable oil out of your life is going to be so important for the future generations.

Tony Federico: We're planting the seeds now of what are our health and our lives are going to be in the future, so one of those to be good seats. I appreciate the work that you're doing making that possible. Thanks again for joining us on the show. I hope everyone checks out your new edition of Deep Nutrition.

Dr. Cate S.: Thanks for helping me spread the word.

Tony Federico: That was Dr. Cate Shanahan. To find out more about Dr. Cate and her newly updated book, Deep Nutrition, just go to her website, [drcate.com](http://drcate.com). Next week's show will be a Paleo Radio Bite featuring Top Chef Canada contestant and farm-to-table restauranter, Chef Trevor Bird here's a preview.

Trevor Bird: The easiest way to cook any piece of meat is a really low and slow method where you just season your meat really heavily with salt. When I say heavily, I mean like let it rain on top of the meat a lot. Pepper, let it sit on your counter for about an hour. Put it in your oven at 200 degrees Fahrenheit so just like let your beef hang out in that oven for 45 minutes to an hour and it will really evenly cook your whole piece of meat to a medium rare. Your window of over cooking the meat goes from say a minute to two minutes to 15 minutes.

Tony Federico: To learn more about meat cooking technique as well as Trevor's grass-fed beef delivery company [meat.me](http://meat.me), you'll have to tune into next week's show. To make sure you don't miss it, just subscribe to Paleo Magazine Radio on iTunes or favorite us on Stitcher.

Before we go, I'd like to thank the sponsor of today's show, Healthy Human. If your New Year's resolution includes drinking more water, they've got you covered. Speaking of resolutions, our current issue of Paleo Magazine features an article by registered dietitian and nutritional therapy practitioner Diana Rodgers. In it, Diana will help you make diet that resolutions that stick. In addition to 11 battle-tested tips, she also presents ways to troubleshoot common issues like sugar cravings, headaches, and constipation that often cause people to fall off the wagon. To read the full article, pick up a copy of Paleo Magazine at your favorite specialty grocery bookstore or sign up for a digital or print subscription on our website, [paleomagonline.com](http://paleomagonline.com).

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