Why Seed Oils Are Driving Obesity and Metabolic Dysfunction Transcript

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Introduction and guest background

Seed oils contain certain fatty acids in larger quantities than other oils. And those fatty acids are unstable molecules that when they break apart become reactive.

And reactive in this context means like they'll steal electrons away from other molecules and cells. And what that really means is they'll just like damage biological matter.

Hi, it's Dr. Jenn. Welcome back to the podcast. Today we are going to be talking to the CEO of a company that I am obsessed with their chips and I talk about them all the time.

So we have Stephen Rufrano. He's an entrepreneur and founder of the company Ancient Crunch. which is the company behind Health Focus Snack Brands, Mesa Chips, and Vandy Chris.

So he grew up in New Jersey and he has quite an interesting story on how he got into this health space. So I'm excited to talk to him about the business of food and the business of healthy food.

So welcome to the podcast, Stephen. Thank you, Dr. Jen. Happy to be here. Yes, awesome. Well, I would just love for you to share with our audience like why you started this company, because it is not easy to start a company like this.

It's actually a very hard, tricky space. So what was your passion behind your company, Ancient Crunch? Sure. Yeah, so I had been since college, I've been really into health on a personal level.

I had some chronic health issues from growing up that I found out about that like I could fix with my own diet and lifestyle choices. Pretty obvious. I'm sure a lot of people know how that works these days.

But for me as 19 year old, that was sort of eye opening revelation. And so I just got I think the Paleo diet was popular at the time. So I did that and I was like, wait, I'm not getting sick anymore.

I can breathe through my nose. All this is so good. And then I just kept learning and doing more and more stuff. I went through all the phases. Over the past 10 years, there was a fermentation phase.

I would make kombucha in my dorm room. I had sprouted broccoli seeds and sprouted quinoa. I had sourdough bread that I was baking in my studio apartment.

Learning all the things about natural foods and ultimately I think after a few years, I had come to annoy all of my friends and family so sufficiently that the only place left for my opinions was social media.

So I started a TikTok in 2021. And at that time, seed oils were very popular. So I ended up talking a lot about seed oils. I just hadn't eaten them because I didn't eat processed food.

So going into it, It was not a thing that I was thinking a ton of, but then I learned more about it and I realized how terrible it is and how ubiquitous they are.

So I talk a lot about that, a lot about ancestral eating in various ways. And it was a few months after that when I was hanging out with some friends and one of them was eating Tostitos.

And I'm sitting here thinking, I'm the seedle influencer. How dare you eat Tostitos in my presence? Like, started lecturing him about this. And we basically came to the conclusion that, you know, you could have healthy tortilla chips.

Like, I'm not saying don't eat delicious foods. Like, everyone wants to eat crunchy carbs and everything else. We don't have to give that up. But if you're going to have a tortilla chip, it should be made in a certain way.

And I start hypothetically describing, like, tallow-fried tortillas made with organic corn, blah, blah, blah. My friend said, hey, that sounds pretty interesting.

Well, where can I go buy those? He had never heard of this idea that healthy food could taste good. And I'm describing something that would taste good and would also be healthy.

And I told him, unfortunately, you can't. No one sells them at that point in time. And of course, being, you know, entrepreneurially minded gentleman in our, I think, mid-20s, he kind of challenged me like, well, why don't you go make them yourself?

And so I took it to heart. And then a few weeks later, I ended up buying a turkey fryer, like a propane fired outdoor turkey fryer, some grass-fed tallows, some organic corn tortillas, chopped them up and made the first prototype in my parents' backyard on Easter of 2022.

Why Ancient Crunch was started

And the two things about them, first of all, this is the first thing, first time I had ever fried anything in my entire life. So like, not have any opportunity to light things on fire, but it was very interesting, very messy.

But more importantly, I realized that they actually tasted really good. So I had previously theorized that they would and actually made them and I was kind of expecting them to be greasy or beefy or something, but they were delicious.

And not only I thought that, but the rest of my family and extended family who was present also thought they were delicious. And that really hit home for me because up until that point, a lot of the health things that I had done, whether it was eating raw liver or whatever, normal people didn't necessarily want to participate, shall we say.

But here we have ostensibly normal people who are like, hey, this health thing that Stephen likes is actually really delicious. So that's when I knew that was like the holy grail combo.

And of course, at that time, siete chips were a thing I had known about them. And I'm like, no one likes that. They don't taste very good. other healthy snacks in a similar way don't taste very good.

And so I figured that was the magic bullet there. And so me and the friend that had challenged me to make them, he's now my business partner, we decided to go sell them.

And we did. And I was not anticipating on starting a chip company or a CPG company or doing anything like this at all. I was happy making my TikToks at the time.

and working at the job that I had as a software engineer. And so it kind of took off, and three and a half years later, we're now in Sprouts nationwide.

We'll be in another, shall we say, similar major retailer very soon. We have hundreds of thousands of people that have bought moss chips and bandy, which is our potato chips that we came out with later.

And yeah, we're gonna get everyone eating tele-fried chips. So pretty cool. Yeah, you were kind of a trailblazer for things fried in tallow and things other than seed oil.

And I think that's really important. I've noticed when I eat masa chips that I don't get as big of a sugar glucose spike. Cassava really does spike that.

You know, it's tough because corn is kind of demonized as, you know, a bad food to eat. And these chips, though,

they're cooked differently. So they're not as processed food.

Like, I don't think of these chips as processed as much as Tostitos. Can you explain how you soak the corn and what makes this ancient way of making these chips different?

Sure. So every culture, for the most part, every civilization has been built off of the back of at least one carbohydrate. So in Asia, in East Asia, they had rice.

In Europe and the Mediterranean, they had bread. In the South and Central and whatever, the Americas, they had either potatoes or corn. And with few exceptions, all of those civilizations who had maintained a society off of like large scale agricultural production of carbohydrates figured out one way, figured out a way of treating the carbohydrates to make them more digestible.

Carbohydrates come from plants, as we know. And if you have, you know, if you ever listen to Paul Celadino or any of those people, you know, the plant defense mechanisms, all that stuff, right?

Like there are things that plants have that make them harder to digest in their unadulterated natural state. And if you're going to have society built off them, you have to figure out how to deal with that.

And so when you cook rice, you don't eat raw rice, you soak and boil it. When you eat wheat, you don't just eat some wheat, you grind it up and ferment it using sourdough fermentation turned into bread.

and yet no one was eating wheat that was not bread in Egypt or Rome or whatever. And similarly for corn, the Mesoamericans and particularly the Aztecs discovered, I think it's at least 10,000 years ago, but maybe it's close to 6,000, I'm not entirely sure, this method called nixtamalization, where you boil the corn and soak it in a solution of essentially limestone, like crushed up limestone powder, which is calcium hydroxide.

And that alkaline solution and the heat breaks down the outer hard cellulose shell, which is called the pericarp. And it's the type of thing that if you ever eat corn the cob and you would see the shells of the corn in the toilet the next day, that's that.

And so those are broken down and get washed away. And there's a whole slew of other, you know, microbiological things that happen. Enzymes change, vitamins are made more bioavailable.

vitamin B1 in particular. So interestingly, a lot of the settlers to North America didn't, like corn is very popular in the South, grits and cornbread and whatever.

And a lot of settlers in North America didn't realize that they had to do this for corn. And so they would just eat the raw corn or without this nixtamalization process.

And a lot of them would develop pellagra, which is a vitamin B1 deficiency disease because corn that is Not treated in this way is very low in vitamin B1 or active vitamin B1.

So yeah, it's an important part of the process and I would not personally eat any corn products that has not undergone that process in the same way that I won't eat.

non sourdough fermented wheat. I'll eat sourdough cookies and croissants and whatever all day. I'm not just going to go eat some flour that's not been fermented.

So it's very important when considering carbohydrates in general and corn in particular that the corn that you're eating has undergone this process. And it can take many forms, whether it's fresh tortillas, or chips, or even like you could do this for cornbread, or you just buy the flour made from the dried and ground up version of the post nixtamalized corn.

That's called masa harina. You should eat corn that's prepared in that way. And in your reference to the glucose

spiking thing, yeah, cassava has a very high glycemic index.

It is also the most calorie dense carbohydrate that exists. Ironically enough, people are like, oh, my health food, I'm going to eat cassava chips. If you're on a diet and you're eating the most calorie-dense high-glycemic carbohydrate because somehow that's better than corn and you're the first person in your entire bloodline to ever even see a cassava, eat one.

Yeah. Something went wrong here. Yeah, it's grain-free. Okay, cool. Yeah. Yeah, and this is why it's crazy because so many in my my six year old, he loves both of the chips.

He likes the lime masa and he likes yada. But for me, my blood sugar like really got jacked on that. And I was pretty surprised. But also cassava is very high in pesticides.

And yeah, yeah, like they're not organic. It all comes from like random places in Southeast Asia that I don't have environmental regulations of any kind.

So you just have to be careful. You really, when you look at like snack food that's healthy, you know, quote unquote, it's still processed. Like you just have to be very aware.

Because a lot of people, we actually gave out the chips, the masa chips to my kids' teachers this year. And yeah, and they were like, what's so special about these?

And my kids are like, they're cooked in tallow, they're seed oil free. And it's like, you know, it's almost it's like a functional food. You're not just having a snack.

You're having something more nourishing because as your point like B1 thiamine, having it be active. Active B1 is important. That helps with neuropathy and heart health and energy production.

So if you're getting these nutrients, B1 deficiency is actually a pretty big problem. in the US.

Nixtamalization and how masa chips are made

So I like that if we're fueling our bodies, if we're picking a snack food and it's actually healthy for our body, that's worth the pain a little bit extra in my opinion.

Right, yeah, there's an interesting thing. I'm not a big snacker, interestingly enough. I eat moss chips. It's not a snack. It's like, I'm going to have dinner.

I'm going to have carbohydrate, or lunch, or whatever. I'm going to have a carbohydrate of some kind with it. And it's a lot easier to just get moss chips and have that with ground beef in a nacho bowl, or band-aid chips, and have that with steak, than having to cook those from scratch.

Properly cooking and preparing carbohydrates is a very labor-intensive process. Whatever it is, you know, boiling potatoes, baking potatoes, mixing corn, boiling rice, boiling pasta.

Like even though some of those are easier than others, baking sourdough bread, right? Like if it's beef, you just stick it on a pan for two seconds and it's edible.

But for carbohydrates, you have to do a ton of work. And so I don't end up snacking, but it's like that's a large component of the meal. And I think a lot of our customers do the same, right?

Like I never have a steak and Doritos. like ground beef and Doritos like who would ever do that but like you can have ground beef bowl and lost chips and it's like that's your lunch and actually way better and then also I think the you'd probably know more about this than I do but Sugar is not the only thing that causes blood sugar spiking, right?

It depends on protein, what else you eat with it, and also fat. So Kate Shanahan, Dr. Kate Shanahan in her book talks about this. Seed oils are a very large contributor to glucose spiking, opposed to blood glucose spiking.

Which is kind of counterintuitive because you think, oh, sugar, blood sugar. And I'm sure the mechanism makes sense and I'm not necessarily the best person to try to explain it.

However, if I made my chips with vegetable oils or I made the same chips with the same corn, right, with tallow, you would for sure have a less pronounced glucose spike with the tallow version because of the saturated fat.

So that's a big difference. Yeah, and to your point about the blood sugar and everything, insulin resistance is such a problem for midlife women, women going through perianapause.

They get insulin resistance and weight gain, and then their hormones are struggling. What influence do you think seed oil plays a role at that? Because you said you dove deep into seed oil, so why are they so nasty?

Yeah, it's a great question. The summary version of how I think it's easy to explain this is that seed oils contain certain fatty acids in larger quantities than other oils.

And those fatty acids are unstable molecules that when they break apart become reactive. And reactive in this context means like they'll steal electrons away from other molecules and cells.

And what that really means is they'll just like damage biological matter and so when you eat them they get everywhere right just it's like fat is everywhere in your body in some form or another and so they create these it's free radicals it's what it's caused and most called and most people are familiar with this reactive oxygen reactive oxygen species oxidative stress it's all the same sort of thing.

And so wherever they go, whether it's in your skin or in your bowels or in your stomach or your heart or eyeballs or whatever, they just create damage because they're like these damaged reactive molecules that are there to like pull, you know, electrons away from other molecules in your cells.

And that's a big problem. And one of the reasons why seed oils end up showing up in so many things, it sounds unbelievable, right? Seed oils cause this.

Seed oils cause that. Yeah, it's not that there's like this magic molecule that's like designed to uniquely target every aspect of your body in a damaging way.

It's simply the presence of them itself is incompatible with mammalian but especially human physiology. And so wherever they go, they end up creating some kind of damage because the way we call diseases based on localized symptoms, we just end up having a million different names for those diseases.

And the metabolic stress thing, the insulin resistance is driven by these in large part because when you go use food for energy, the mitochondria have to burn it effectively.

And that burning is a purposeful breaking apart of these molecules, which are reactive to damaging. And so the mitochondria learn, I don't want to do this because if I do it destroys my, it damages me, the mitochondria.

And so your basic ability to produce cellular energy is diminished the more sedols you have. And that obviously messes up with your metabolism because if they're a large part of the calories you're eating, those calories don't end up getting burned, they're going to get stored as body fat, and then you have this whole metabolic issue.

So yeah, Kate Shanahan's book explains this better than I can. Dark Calories by Dr. Kate Shanahan. Recommend it. Yeah, I actually love her first book, Deep Nutrition.

I would have handed it out when I was first starting out in integrative medicine to patients. And actually, so my dad, very hard to convince about some things.

He's a lawyer, well kind of retired, but not really so hard to convince. And he started reading that book and he's like, oh yeah, seed oils are pretty bad.

He still will eat them, still trying to get him to sway, you know, away from those chips and stuff. But it's hard, you know, I like how to explain it, you know, seed oils, like sunflower oils, and those that are higher in omega-6, basically, they are more fragile, their bonds.

So if they're heated up, it turns into that oxidative stress to the body, versus saturated fat, they're more heat stable. So then there's this lie out there, because people have come there like, what about cold-pressed organic studies?

Yeah, exactly. And I'm like, that is just, you know, greenwashing, because I'm like, think about it. If you have 20 people huddled up, they're not, you're pressing them together, they're not like, You know, you're not heating them up, but they're heating each other up and those.

Beyond that, like the body, your body is 98.6 degrees. It is hot enough to oxidize. It doesn't matter how cold they were kept before you eat them. Once they enter your body, they're in a hot oxygen rich environment.

So it doesn't really matter. So where did we go wrong with the seed oils? Because obviously, you know, it's about money and there's a big push with influencers still trying to debunk that.

You know, people say seed oils are bad. They're like, we have all these studies that they're fine and people do fine with them. Well, we know that's BS, that's paid studies.

So what happened? Because seed oils weren't even a thing before the 1900s. And interestingly enough, that is when obesity started creeping up a lot. Yeah, the seed oil and obesity graphs are pretty freaking similar, which is crazy.

Where we went wrong was using them for food. So they started off as, it's a product from Gamble, the soap company. Soap is made from fat. And so previously, back in the day, they would use lard or tallow or whatever fat they could get their hands on.

And pretty much before petroleum and before vegetable oils, the only fat 120 years ago was animal fats. Which are expensive, naturally. And so they ended up hearing about, I guess, the cotton industry, which has this issue where when you process cotton, the cotton seeds are filtered out and that's kind of a waste product.

And cotton seeds, like all seeds, have some amount of oil. And so for many decades, they were trying to figure out how to extract the oil from cotton seeds in order to be able to turn that into soap.

So that's how it started. Like the desire to use seed oils for anything started with Procter & Gamble trying to make efficient use of cotton seeds, which are a waste product of the textile industry.

And so ultimately they figured out how to extract the oil and process it in a way that was useful. But what they discovered was that it wasn't actually the most useful for soap.

But they could hydrogenate it, which is another process invented in the late 1800s or early 1900s, turn it solid, and then just sell that product. And it was called Crisco, which many people have heard about.

Crisco became arguably the first and most, if maybe not the exact first, but one of the most successful and earliest branded consumer products in any category whatsoever.

I launched in 1924 and they convinced several generations of American housewives that if you're going to cook, you should use Crisco because they just, they're also one of the first companies to employ propaganda techniques, which had been recently begun to be researched and studied by psychologists and sociologists.

The guy actually wrote the book called Propaganda, Edward Bernays. He was a consultant for Procter & Gamble

among other companies and yeah, very interesting.

So they're among the first cohort of companies along with Coca-Cola and others that we're probably familiar with to use propaganda in marketing of products as opposed to like influence for government policy and political action.

So they convinced several generations of American housewives to use Crisco, and it obviously worked. And starting in the 50s then, we moved from Crisco more to the oil, like liquid oils themselves, which the processing for those had become developed enough to be able to make it seemingly edible.

And that's another story too. The liquid oils were like canola oil, cottonseed oil, corn oil, whatever. All of that was used largely in World War II for machinery purposes, lubrication and otherwise.

Yeah. Just like many things were used in World War II for military purposes that were then repurposed after the war for civilian purposes.

Seed oils, glucose spikes, and metabolic health

Other examples include the chemical industry, which started like DuPont is the chemical company that was a gun powder company. Like, it's actually kind of crazy how many industries and categories of quote unquote innovation just started out in wartime as an innovation for military purposes that then after the war was done, they're like, hey, we should keep making money.

What else can we do to sell this stuff? So yeah, the liquid oils were then repurposed from machinery uses to food uses, which is terrifying. Yeah, that's that's where it wrong is like we're not we were never supposed to be using this stuff for food.

We never did use it for food. And then because we were using it for something else and that something else kind of went away from a demand side perspective.

how can we use it for something else that did not go away? And that use was food. And so, yeah, it's not meant to be food. It never was meant to be food.

It never even started off as food, in either case, the liquid oils or the Crisco. But that's how it ended up. And today, 30-ish percent of America's calories come from these oils.

That's horrible. And okay, I'm going to put on my tin foil hat. So here's the thing though, if you look at the Flexner report and the Rockefellers and in medication where we were more natural, a little bit more natural in the US and then switched to this big pharmaceutical push because of medications made from petroleum.

So it's similar. And it's so frustrating that, I mean, we know profit drives everything over Americans' health. So it's very, very sick to see, but people still buy Crisco.

I was over at a community dinner in my neighborhood and we don't live in an HOA. These are widespread neighbors because I couldn't deal with an HOA. So we're in there and I was asking for butter and they said, yeah, go in the fridge.

And it was margarine. And my jaw hit the floor. I was like, they still can sell people still buy this but they were so I'm not I wasn't close enough with them to just like talk to them about just how I you know eat butter straight from the fridge from the stick and how butter is actually better for you but but maybe eventually so I guess like how do you shift people's brains right so say that they think that saturated fat is evil seed oils are fine because everyone says they're fine and they're their doctor right you know i'm a doctor but their conventional doctor the you know american heart association still says in there that margarine is fine because i just saw this and i had to say that's a mistake that needs to get taken out So how do you change minds?

And I know that this is part of why you left, you know, your work and this company. Yeah, I think it depends on the

audience naturally. Like if someone knows enough about chemistry, you can explain chemistry to them.

Sure. But I don't think that's very compelling. I think what I've found in my many years of anti-seed oil propagandizing in my own right, is that the most effective form of explanation is actually the history.

Right? Like, if I say a study, then you say, oh, that study. And it's like, well, what are we doing here? We're not going to get anywhere. But if I can tell you, which is true and all verifiable, and much of this comes from the book called The Big Fat Surprise by Nina Teicheltz, I believe is her last name.

She's a journalist. This is like a investigative reporting book. It just explains the history, right? Like, people did not eat these 120 years ago. They never ate them prior.

It's completely novel food to the human diet. And here's how we got from A to B. We got from A to B because of all the stuff I already mentioned. We got from A to B because Procter & Gamble in 1924 gave like $20 million to the American Heart Association to start spreading like Crisco's good for you.

We got here from decades of cultural conditioning and marketing and propaganda and like genuinely fake research. And her book goes into all this. Like, it's very hard to argue that, right?

Maybe you can say, oh, but the study says this, sure. But like, let's think about how we even have someone looking into this with a study and why and who's paying for it and all this stuff.

Once you hear that there's, like, think about it, there's no other food that we eat in any similarly appreciable quantity that is art, like, completely detached from our ancestral diet, completely detached.

Yeah, we eat bread today and a lot of the bread is white bread and it's got pesticides and whatever, but it's fundamentally, it's still bread, right? Does that make sense?

Like we eat meat, maybe it's like, you know, the chickens are bred to have large chicken breasts or whatever, or they're fed factory farm feed. It's still chicken.

I'm not saying it's good and you shouldn't eat it, but like if you think about just categorical sea changes, right? 30% of calories are fat. 30% of calories is a large number of calories.

And that went from not seed oils at all to 100% of those calories come from seed oils. It's a very, very fundamentally different thing, right? Butter.

Yeah, we eat butter. Maybe it's less nutrient dense than butter from 100 years ago. I don't know. But it's still butter. But yeah, then red 40. These are new chemicals.

But like all the food additives that everyone's scared about, which rightly so, they're all consumed in very tiny quantities. How much red 40 do you eat in a year?

Like a milligram, you know? if you're a standard American, maybe two, 10 milligrams, I'm not even sure, but you eat kilograms of seed oils a month if you're an average American.

And so going from zero to that much in such short a time and the reasons why we went there being obviously demonstrably profit generated and not for health reasons, I think that's the most compelling explanation.

So you would say seed oils are the biggest threat in like Like a kid's diet or an adults that that because we are consuming a third of fat Yeah, seed oils.

That's like you're saying that's because protein is protein for right now We could probably argue over doses. I'm sure one pound of glyphosate is worse than one pound of seed oils, but you also don't eat one pound of glyphosate.

Given the practical considerations of how much you actually consume in a reasonable time window, seed oils are certainly the worst and also the easiest to point to.

Right? Because if I say, oh, sugar is bad, well, which I don't actually think, but even if I did, it's much more nuanced, right? Because there's all different types of sugar.

There's honey and maple syrup and this sugar and that's whatever. Similarly with vegetables or wheat, right? Again, it's organic, ancient grain, wheat, good.

versus like pesticide, GMO wheat or whatever. So there's a lot more nuances. Seed oils are just categorically and objectively terrible and a foreign influence in our diet and just by far the largest artificial thing we consume on a daily basis.

So yeah, there are many things that cause health problems and there are many things to watch out for, but seed oils I would confidently say are like, I would stand by them being the single biggest thing to watch out for.

and also in the course of getting them out, you also end up removing a lot of other bad things too, which just makes it even easier, right? Because if I were to say, oh, citric acid is bad, avoid foods with citric acid, right?

It's so meaningless and hard to notice, and you could do it and maybe get some benefit, but also there's still a ton of other terrible things you'd eat.

If you truly did not eat seed oils, at least 50, probably close to 80% of other bad things that you would eat would also go away. Yeah. And a lot of the seed oils are marinated in glyphosate.

So you're getting a double thing. Now, do you know of, do you have any research on this or any papers you've read about Americans having such a high obesity level overall and the seed oil consumption versus other countries?

It is interesting. So some people will say, oh, in Japan, they eat seed oils and they're not fat. But in America, we eat seed oils and we are fat. First of all, like, sort of.

Two things. First of all, East Asians and Americans are physiologically different. So whether some people are more well adapted to it, you know, sesame seed oil has been a thing in Asia, whatever.

Maybe that plays some role. But also, the other thing is that the most widely consumed vegetable oil in East Asia is peanut oil, which is actually much closer to olive oil on the scale of how bad seed oils are than it is to soybean oil, which is by far the worst.

And soybean oil is like the biggest in the US. So there's not all seed oils are created equal. They're all pretty bad. And then there's the whole rest of the diet and lifestyle as well.

So there's enough compounding factors that I would say it's not so clear. But what is clear is that when the American diet is exported, there's this country actually, the fattest country in the world.

And the reason for that is it's like a tiny little, I guess, former naval outpost somewhere in the Pacific. Maybe it was US territory. I totally forget the name.

They don't, it's like a rocky barren wasteland of an island. Like they don't grow anything for whatever environmental reason. There's no fish. Like it's just horrible.

All they have to eat is like imported American style food. And they're the fattest country on earth. Where the American diet goes, obesity follows. And the hallmark of the American diet is large quantities of seed oils.

I'm not saying fried foods are categorically bad, but Americans eat a lot of fried foods and fried foods in America are fried in seed oils as a rule. And frying causes the food to absorb a ton of seed oils or of any oil.

And so when you have the product, when you have so many fried foods and those fried foods are all fried in seed oils, that's like a unique fact of the diet, right?

Like talking about Japan's seed oil consumption. Where do they have oil? Like sushi, there's no oil in that. They make a little stir fry, right? Or they have ramen, there's no oil in that.

How seed oils became common in the food supply

You make a little stir fry, you have a tablespoon of oil for an entire wok full of food. It's not very significant dosing there. So yeah, Americans are just eating it by the kilogram, pound, whatever, by the month.

It's kind of insane. Yeah, it really is. I mean, now, do you have any tips for avoiding seed oils out when you're eating out? Because I think that that is really tough.

Even if you go to a pretty clean restaurant, you can tell your food's shiny. I usually say I'm allergic to seed oil. Yeah, that works. So you can't go to any restaurant that doesn't actually cook their own food.

So Cheesecake Factory, probably not the best. spots go. That being said, you can try to avoid. So yeah, the best thing is to go to a restaurant that like states they don't have it.

The second best is to go to a restaurant where you can ask the chef to make whatever you're going to have without it and have a conversation. And the third best is just learn what's the most potentially damaging and avoid it.

So anything that's fried, again, unless it's explicitly fried in a non-vegetable oil, out. Nothing fried. Nothing deep fried. Anything that is a sauce or an aioli or a dressing, Out.

Completely out. Any… Those are probably the two biggest culprits, honestly. Baked products. Baked products you gotta watch out for. Because they just like load up canola oil in the pumpkin bread or something.

But that's not like a typical restaurant use case. Yeah, so if you're going to a restaurant, like Japanese food, pretty good. Don't get anything fried.

But you know, sushi, sashimi, whatever is good. Or ramen or something. Go and get to steakhouse, get steak, a big potato, pretty easy, steamed vegetables, and Italian food if it's like a nice Italian restaurant or Greek or Mediterranean restaurant where it's like some old Mediterranean dude who's like there who runs it.

And it's like, oh yeah, the aloe comes from like my great aunt's farm in some island. Probably okay. But yeah, to summer, we can nitpick all day, but summery, stay away from the liquids and stay away from the fried foods.

And you'll at least be somewhat okay. And if you can get them to say, oh yeah, saute this with butter, please. And then you're out of the curve. Although a lot of the times the butter also has seed oils in it.

So yeah, be careful. Oh yeah. Yeah. We went to this really nice steak house when I was at a longevity conference in Vegas and my daughter got some just butter to have with her steak.

And she's like, dude, taste this. This has seed oils in it. And we passed around the table and we all like spit it out because it tasted oxidized. So it's, I mean, I've gone as far as bringing my own butter with me, like on vacation places.

That works. Yeah. Yeah, it's really hard. But if you could do a little bit better every time you eat out, then that's better. Now, what are your thoughts on peanut oil and palm oil?

Because I sometimes will say in moderation because they are more heat stable. Yeah, yeah. Well, so like I said before, peanut oil is a lot closer to olive oil than it is to soybean oil.

So it's like, I think low 20%, maybe it's like low 30%. Polyunsaturated fats, olive oil is like 15, soybean is 60. Very different situation. And I mean, that's just your call if you want to go to Five Guys and get the fries.

Up to you. Well, steak and shake. My one son really likes steak and shake. And I'm like, OK, tallow fries. So it's not pure tallow, because they have to have a little bit of a preservative in it to meet FDA requirements.

But it's better. I don't know. I think they fixed that, actually. I don't know. I don't want to speak to that. They fixed their tallow supply chain. Oh, great.

Great. Yeah. No, that's good. Eating out is, is sometimes really scary. And I work with like a lot of perimenopausal women, mothers who are racing their kids to and from travel sports, which that's another whole stressor on its own.

And you know, say they're eating out a lot. So that's why, you know, not perfect tips, but sometimes, you know, yeah, if you only have a half an hour, go to five guys, at least it's in peanut oil.

So. Yeah, Five Guys would be my preferred fast food chain unless you could find a steak and shake or like an actually like, oh, we're aware of this and we do the right thing kind of place.

Yeah. No, I'd love to talk to you, Steven, about this trend that we're seeing where companies like yours that are started out with a passion, healthy alternatives, they start small, they grow bigger, bigger, bigger, and then suddenly bam, they're bought out by Pepsi or Coca-Cola.

What are your thoughts on that? And is that something that's on your radar? Yeah, so I mean obviously prefer to avoid that if possible, which you know hopefully we can it's a hard It's a hard topic because people get mad about it and perhaps rightly so but also They've never run a business And it's so freaking hard and these people, like the Siete, the Garza family was doing it for like a decade.

You know, and it's like, that's not, it's not easy to do that and compete in CPG. It's not easy to start any business, but in particular, like growing a CPG brand, which is consumer packaged goods, snacks, whatever, from scratch.

Is a very very arduous journey and being able to like oh I built this I can like take it easy now it's very it's very compelling part of the advantage also like so yeah we all think it's like bad right there's also advantages and I don't want to sound like I'm defending this but it is what it is.

When Hugh Chocolate was sold, I remember hearing about this, and I was like, oh, they sold out to Mondelez or whatever. Whatever, pick your thing, Epic Meat to craft or Epic Meat Sticks.

Pick any of these things. Before they sold, you cannot find Epic Meat Bars or Hugh Chocolate in an airport. And now you can't. You cannot find them in some random ass grocery store in the middle of nowhere, and now you can't.

The things that the big food companies do very, very well, and people don't really understand this, is that they're not really manufacturing companies or even agricultural companies.

They are distribution companies. Their entire life is around optimizing and reducing the cost of getting a product from point A to point B and as many point Bs as possible.

The fact that Lay's or Doritos are available literally everywhere on earth is like that doesn't just happen by accident. And I'm not saying I think it's worth it.

That being said, it would probably take us. And several decades, if not more, for us to have our products in the same quantity of places that say Doritos and Lays and Fritos are.

Maybe they don't need to be there, right? Maybe we don't want that. But it would actually take that long. And so if you're thinking, and I think this is actually pretty compelling, if you're thinking, oh, I want my Hue chocolate or I want

my Siete chips or I want my whatever, this thing that I spent so much work trying to create and get out to people so they can eat it and feel better.

If I want that stuff to be everywhere, then the really only practical way of doing that is by selling it. And there's plenty of deals where the founders were able to negotiate this sort of like recipe preservation contracts and provisions.

And I know of several of them, I don't necessarily need to name them because it was told to me by the actual founders. So whatever. That's a real thing.

And if you're the buyer, your job is to make money, right? Your job is not to piss off your customers who have been buying that brand for a decade. Your job is to keep doing it.

That being said, I'm sure over time various incentives sneak in and it's just obvious that the quality is going to degrade somewhat. And then the question becomes how much.

Eating out, restaurant tips, and better fats

But yeah, so there's certain compelling reasons why it would actually be good, right? The cheapest person who would get you masa chips is PepsiCo. Right.

They will have freight costs far lower than anything I could ever hope to get from our vendors. They will have even buying organic potatoes. Right. They'll just buy more of them.

So they could buy the same potatoes. They just get a cheaper price because they buy more of them. Yeah, so there are on paper advantages and then the other reasons that people sell.

Yeah, it's freaking hard. It's not it's not the most pleasant situation and then there's another and I'm trying to blame anyone here and maybe this is getting a little ranty therapy session at the moment, but People will say, oh, that's too expensive.

You know, even Seattle is too expensive. Seattle is cheap compared to what we sell. That's too expensive, I can't afford this, whatever. And they'll get mad when they sell to Pepsi.

It's like, what do you think? Like, who do you think is behind the cheap food that you think food should, like the price, the cheap price that you think food should be priced at?

It's not the Garza family, like, who's able to get you cheap food. It's not me, I'm not able to get you things cheaply. Pepsi's able to get you things cheaply.

So if you want to pay a low price, And then you also don't want them to sell their business. What do you, what did you expect? Right. You're speaking out besides your mouth.

And there's another issue too, which is that, and let's say Seattle was actually priced pretty reasonably. They did not have, they were about a dollar an ounce on shelf for most of their products.

Doritos for context are like 35 to 55 cents an ounce. So a good like two to three-ish times more expensive and were like two or three times more expensive than Siete.

That's still pretty cheap as far as Siete's actual cost structure is concerned. They're not making much money. That is not the Garza family going and like flying private jets around because they're selling you cassava chips at one dollar an ounce.

They're barely making any money as far as a scale of business is concerned. And so then the other problem with that is the less money you make as a business, the longer it takes for your business to make enough money that

would equal the amount of money you would make if you sold your business.

So think about this very simply. If a business made $100 million a year in sales and $5 million in profit, and they can sell the business for $500 million, it would take them how many years of $5 million profit accrual?

What is that? 10 years, 100 years? 100 years, right, to make $500 million. But if a business made $100 million in sales but had $40 million in profit, right, it would take them a little over 10 years to make what they would make if they sold the business.

And so there's this double layer to it where like the cheaper the price is, the less money the business makes and the even more incentive there is for the business owner to sell it.

So yeah, I understand the reaction. Oh, we don't want people to sell out. But I think it betrays a lack of understanding of how all this works on part of the consumer, which you can't fault anyone for because no one knows how this works.

But all these things have consequences that you may not have been able to predict. Suffice to say, building a business is hard. You have customers, you have suppliers, you have retailers.

Everyone's angry. This is too expensive. This doesn't taste good. Whatever, whatever, whatever. And on top of that, you don't sell at a very high price, you make no money.

And then at 10 years in, you're like, well, at least this thing can be given, it can be spread out to more mouths to feed than I could do on my own. And it all adds up and forms a pretty compelling argument.

So yeah, that's kind of how that works. I don't know if that was helpful more for you or for me. Yeah, it was great. So you got a therapy session, but it's kind of, I feel the same way.

Everyone was outraged when Sierra sold out, when Poppy sold out, when all these companies, and I'm like, they had so much sweat equity into that. And, you know, as long as the ingredients stay about the same, or even if they change a little bit, still healthier food is getting out there and it's going to be on the shelves where people now see it and they wouldn't normally.

So I think there's positives and minuses. And we also have to just, like you were saying, like people are like, that's too expensive. I can't afford it.

Oh, how dare they sell. And I'm like these influencers. I don't know if that's how they really think, or they're just trying to rage bait people. Cause I'm like, yeah, I pick one.

Right. Like you're either happy to pay the prices that small businesses need or like not die and like be mildly successful or you demand lower prices and you're stuck with Pepsi and Coke is what it is.

Or just like be happy for some of these companies. They were trailblazers like you guys like sweat equity. You're working your butts off. It's really hard to own a business.

And when I had my brick and mortar, you know, I had people leave, you know, like a massage therapist once and she was like, I'm going to do it on my own." And yeah, she realized it wasn't as easy.

Yeah, go ahead. Have fun. Yeah. Yeah, I'm like, cool. You'll fry 400,000 bags of chips a month. See how easy that is. Yeah. So I mean, it's definitely, I think everything looks easier if you're not doing it yourself.

Growth, acquisitions, and building a snack brand

And then everyone can be a critic. So yeah, I agree with you exactly on what you said with all of that. So I think that's great that You guys want to just keep, you know, keep going to keep trailblazing.

Cause you were the first tallow chip and tortilla company that I ever knew of. Yeah, we were the first. Often copied or often imitated. What's the phrase?

Never equaled or rivaled? Yeah. I obviously stay up to date with who the competition is. It's not very good. We have by far the best ingredient and supply chain sourcing of anyone.

I mean, organic potatoes alone. Who doesn't sell organic potatoes? I haven't seen a potato chip made with organic potatoes. You can't just buy them. We have a farmer in Idaho who plants hundreds of acres of potatoes.

You can't just go and get that many organic potatoes because storing them for years is so difficult without toxic and synthetic anti-spud gases and other treatment stuff.

That's a good point. Yeah. And this has to be thought of years in advance, not just plant potatoes in May for harvest in September for use the following year.

Yeah. Right. So it's not, yeah, like lime powder. I also have yet to see a lime flavored chip that actually just uses lime, like the fruit, as opposed to lime oil or citric acid or extract of whatever the heck or maltodextrin.

I haven't seen that yet. This is funny. You'll laugh at this, Stephen. So my husband and I, when we road trip, like sometimes I won't pack enough Mesa chips.

and he'll like try to eat it all and I'm like no like you're eating seed oils like you're gonna get fries this weekend like I'm like seed oil free right now it's so funny we'll like get invites about his like Jenny that's so dramatic and I'm like okay go seed oil free and you can eat my Mesa chips no I mean now I just pack extra but I do talk with my kids you know just about seed oils why you know and I think just education is so important when it comes to recognizing what brands are really gonna be healthy when we need a functional food, not just a snack food.

So yeah, I love them. I always pack them on a road trip. Usually I throw them in my suitcase too when I'm traveling, because stress, you just want something crunchy sometimes.

So when I'm traveling, we tend to be more stressed, but I would love to do some rapid fire questions with you. Okay, Steven, what is one career you almost chose?

I guess I did. I was a software engineer for a good two years before I quit to go do mass chips. So I guess it's tech, you could say. Sure. Yeah, that's awesome.

Favorite habit that rescues a tough day? Praying. Great. Love that. That should be everyone's go-to, right? What is one wellness rule that you'll happily break sometimes?

Don't say eating seed oils. I will not happily break that actually, and I won't do it sometimes. Let's roll a little break sometime. Probably something to do with my usage of digital devices, like I'll end up being on my phone or whatever computer for later than I should be.

Staying up late.

Rapid-fire questions and where to find the brands

Yeah, on my computer. There you go. Last one, one word only. What is one word you want our listeners to take with them into the week? take with them into the week.

Tallo, I guess. Sure. Yeah. Good one. Not motivational speaker, but yeah, that works. I think that's good motivation. Yeah. Give it, give it, give you some tallow, you know, everyone should be talking tallow.

True. Yeah. Awesome. Well, thank you so much for being on the podcast. Can you let everyone know how to grab some chips? I do have a co-doctor Jen for the masa chips and I, I'm always bringing them everywhere with me

because they're, they are really good and satisfying, but they're, they're addicting.

They're so good, but how can everyone support you and find you and what's your TikTok? Are you still doing it? Sure. I'm not, I have not been on TikTok.

I just think it still exists, but I've been on for a while. They can find me personally on Instagram or Twitter, Really Tan Man is my name, but I really don't post much.

Maybe I will again in the future when I have time. But the mosschips, m-a-s-a-c-h-i-p-s.com. Vanity, potato chips, v-a-n-d-y-c-r-i-s-p-s, vanitycrisps.com.

And it sounds like you have code, which is great. And that's kind of it. Okay, great. Well, thank you so much for your time and just keep fighting the good fight.

Thank you. Appreciate it, Dr. Jen. Thanks for having me.