## VIDEO\_ Diet Doctor Podcast with Todd White (Episode 6)

**Dr. Bret Scher:** Welcome the DietDoctor podcast episode number six with Todd White. I want to preempt this episode with an intro to the intro. I filmed and recorded this episode the same day that I recorded the episode with Dr. Joseph Antoun. There was a conference here in San Diego, called the Mindshare Conference, which is basically a health-related business conference.

So it's no coincidence that I recorded two CEOs back to back. And it's a tight rope to walk interviewing CEOs to get their experience and learn from them and the science without blatantly promoting their products. After some of the feedback we got after episode number four, it's clear I didn't do as good of a job of walking that tight rope. And because of that we debated not even releasing this episode with Todd White.

But I've got to admit, that didn't sit well with me because I really enjoyed this interview because Todd is a phenomenal human being. So much more than just a CEO of a company. And we talked about so many different things besides his product. Now alcohol is a toxin, is a legal toxin, and we talked about that explicitly in this interview and I won't encourage any nondrinkers to start drinking.

But let's be honest alcohol is so pervasive in our society and I constantly get questions from clients and people that they want to know how alcohol can fit into a low-carb lifestyle. So for that reason alone I thought this would be a great interview for everybody to hear, to learn from Todd's experience. But his experience goes so far beyond just alcohol.

He's been a low-carb bio hacker for over a decade. So learning about his experiences with staying low-carb on the road and how he incorporates exercise and his meditation and mindfulness was incredible because that's such a big part of his life and his company culture. And the combination of going into ketosis and meditation has helped his mental clarity tremendously and I think that's a great lesson for people to hear and learn from.

And of course we talk a lot about alcohol and wine, but they're all important lessons. So I hope you can appreciate these lessons and learn a lot from them in this episode. Now rest assured after this episode we're going to transition away from the CEOs and we're going back to these scientists and thought leaders, and the doctors and the nutritionists in a different version of interviews.

But despite the fact that he's a CEO, I hope you appreciate this is not a blatant endorsement of his product. DietDoctor does not endorse any products. But this is an exploration of his knowledge and his experience and I hope you can benefit from that. So thank you for listening and thank you for your comments.

Seriously, if you like it, if you don't like it, I want to hear your comments, because that's how we get to change and that's how we get to learn what you, our bosses, our listeners, want to hear, so we can help you learn in ways that's going to help improve your life and help make low-carb living simple. So thanks for listening and I hope you'll enjoy this episode number six with Todd White. Welcome to the DietDoctor podcast. Here I'm joined by Todd White from Dry Farm Wines. Thank so much for joining Todd.

**Todd White:** Super happy to be here, lots to talk about today.

**Bret:** Lots to talk about... so here we are in San Diego at this Mindshare Conference where there are so many people walking around and interested in health, their own health and helping other people with their health and their lives.

And I want to get into your health and your life and sort of the journey that you've taken to get here, because I had the pleasure of meeting you a couple of weeks ago at low-carb San Diego and immediately I knew I had to get you on this podcast. Because you're a self-described bio hacker, you've had your own journey into becoming part of this ketotic movement and a lifestyle of low-carb and ketosis and it always fascinates me how people got to this point.

So I'm curious if you could spend a few minutes telling us about how you got into bio hacking, N of 1 experiments, and what eventually brought you to a ketogenic lifestyle.

**Todd:** Well, I experimented with ketosis like most people to breakthrough a weight loss plateau. And I wasn't terribly overweight fortunately because I've been low-carb since... I've been more or less low-carb since the probably mid 1980s experimenting with Atkins, so I knew a little bit about ketosis, but the ketogenic movement didn't really start to bubble up and the science get real solid about five years ago.

And as you know now it's become very popular in the mainstream media. But when I became ketogenic just over four years ago, it was still very, very much only talked about in the bio hacking circles. And I've been a pretty serious bio hacker for about a decade and became ketogenic just over four years ago.

So I mention at the time I thought I wanted to breakthrough... It was kind of I was on the last 5 to 8 pounds of pesky weight that I couldn't get rid of. And because I'd had a

very positive experience with Atkins, this time I knew a little bit more about the ketogenic diet, that was research that was coming available and testing beyond... urine sticks, blood testing was becoming a little bit more popular in the bio hacking circles and so I kind of dove pretty deep in and ended up...

It's shocking to me, but ended up not losing 5 to 8 pounds, which was I thought what I needed to lose, but I actually lost 22 pounds. Well, 22 pounds since the high point when I began. Of the 22 another five or six came off in the last couple of years when I went to a pretty stringent intermittent fasting regimen and I lost another five or six pounds with that.

But my goal wasn't to lose weight necessarily. I just wanted to break through this plateau, I just kind of plateaued off. But anyway, I remained practicing a ketogenic lifestyle, because of the cognitive benefits. And so that's really why-- and I just feel better.

**Bret:** Yeah, that's so interesting, I mean weight loss may be the hook that get so many people to want to try this lifestyle. It gets them in the door. But what keeps them is exactly what you're talking about. Feeling better physically and mentally. And as a business owner you know how important it is to be sharp and on top of your game. So what are some of the differences you notice there?

**Todd:** Before I touch on that, about weight loss and ketosis I always like to say that weight loss is an awesome side effect of the ketogenic diet. But it's not the reason you should practice it, but is a terrific side effect. I think I saw a remarkable-- I would add that at the same time, we'll talk about this, but I had a monumental shift in my wellness and lifestyle at the same time that I became ketogenic.

I also started practicing meditation on a daily basis what I call, you know, therapeutic meditation. When I first began I was practicing twice a day. Now I just practice meditation once a day, well actually twice... because once on my own at home before I leave and then at my office we also meditate for an hour together there before we start our workday. But that being said, I just kind of described some of the benefits.

The problem is it could be some cofactors here. So I am not sure I had a meaningful, meaningful increase in short-term memory and a very meaningful increase in flow state and just general neurochemical regulation imbalance. And I would say again because I began a strict ketogenic diet along with a very steady meditation practice, I'm sure both contributed to cognitive advancement, especially with memory I think.

So it's kind of hard to say exactly what all of my side effects were, but I continue to practice both today. I do occasionally come out of ketosis once or twice a year for a couple of generally 1 to 2 weeks. And this is typically involved in specific travels to

Italy, wine buying trips, where I am spending the days with Italian farmers on small family farms and then eating with them.

**Bret:** And they want to serve you pasta and you have to be polite.

**Todd:** They do, pasta and bread are the staple of their lifestyle. I will say that it doesn't seem to affect me as much there. This was commonly reported where people say that Italian pasta and bread don't have the same negative impact on me that it would seem to if I ate it here.

So I'm sure I'm coming out-- I don't do regular blood testing on ketosis anymore, because it's unpleasant to prick my finger all the time and this is just not necessary, because as you know, if you're living a ketogenic lifestyle, you can feel when you're in ketosis, it's kind of a brain buzz, you know, you know you can feel it.

So really blood testing for me is quite unnecessary. But yes, I just found tremendous flow state, memory improvement, particularly short-term, like with telephone numbers and crazy things like that, that I just didn't have before.

And I'm sure part of it was that, you know, the busyness of the mind, which meditation helped with, but one of things that's really interesting about the ketogenic diet for me and again could be the cofactor of meditation as well, is that I had historically through my life suffered from I would say mild depression not clinically...

I've never been treated for it or anything like that, but I just would have off days, right? And that also disappeared. That's when I say this balance of neurochemical regulation imbalance, and there's a lot of studies on this as well.

**Bret:** And like any good bio hacker though it's important to point out the potential confounding variables, but, gosh, what a powerful combination of a ketogenic diet and meditation! And I think that's so important to point out because we spend so much time talking about food and about diet and nutrition, which is undeniably important.

But we can't forget about the rest of our health and the rest of our life and that's why meditation is so important and also exercise. So off-line we were talking about exercising. You travel a lot and you see a lot of different hotel gyms and you're here and you're in Europe and you try and keep up your daily exercise routine. How has that impacted your health and what are the challenges you see of keeping that up every day with your schedule?

**Todd:** Well I mentioned earlier that I'm on very strict intermittent fasting protocols, so I only eat once per day. This makes my diet program, my nutritional program

extremely simple. So I'm only eating once per day. On exercise... with travel my exercise program varies between, you know, body weight, work, hotel gyms and I do a lot of running on the road.

Running is just for me... I don't run fast anymore because of my age. I used to run a lot faster, now I run very slow, but it's a great way to see cities. It's a terrific way. So walking and running just enables you to experience a city or a region.

Oftentimes I'm traveling in the country, in the rural side of a country, because I work with farmers. And you just get to see so much of nature. Runs are my primary on the road... and hotel gyms, my primary method of fitness.

**Bret:** It's a great thing about running, you just need a pair of shoes and a road and away you go. And a decent sense of direction.

**Todd:** So I don't have any real challenges other than what I mentioned with the Italians wanting to feed me pasta, I don't have any real challenges with fitness or remaining ketogenic on the road, particularly because I'm only eating once per day.

**Bret:** It's interesting, that definitely makes it a lot easier when you only have to make food choices once per day, especially when you're in and out of airports and in and out of hotels, where you might not have everything available as you'd like. So for people who aren't eating just once a day, eating twice a day, maybe even three times a day, what kind of general advice can you give them to say, "Look, you don't have to worry when you travel, stay ketogenic, isn't that hard, here are some of my top tips for you"?

**Todd:** Well, when I did eat more often, eggs were my go-to sort of breakfast meal. Eggs are widely available all over the world. So that's an easy one. I think for lunch I'd happen to have a weakness for cheeseburgers. I realize I'm not eating grass fed beef most places which is too bad. So cheeseburger, no buns, another favorite, you know, salads with anything.

You know, you can get a club sandwich and break the club sandwich down, get rid of all the bread and then you got bacon and ham and turkey or chicken and that along with a salad, you mix that in with a salad if you're traveling. In decent restaurants as we have here at this hotel where we're staying, we get extra virgin olive oil from the kitchen.

In fact the olive oil that they bring out to the table here at this hotel is not a very high quality. And so we actually request and the chefs send this out, you know, in a serving bowl actually extra virgin olive oil that they're using to cook with.

And so it's not the condiment that comes out to the table. So we're olive oil experts because we're wine experts and many of our winegrowers also grow olives. And so, because we're taste Masters and we can smell and taste an olive oil, and know whether or not it's legitimate...

Bret: Interesting. So we're going to get into Dry Farm Olive Oils here soon?

**Todd:** They're already underway. We're already bringing some olive oil over for our members. We're about to expand the program and actually we're about to steer 11 health quantified tests for olive oil. So like we lab test wines, we're also going to be lab testing olive oils and rating them by their antioxidant value.

**Bret:** Excellent, excellent. I want to get back to one thing you said before that you start every day with your staff with an hour of meditation. That's fascinating for the culture of a business, because most businessmen or CEOs would say, "I'm not going to waste an hour of productivity when they're on the clock, with meditating", but clearly you take another stand. So what have you noticed in the performance of your staff, the culture of your staff and also what about those who maybe aren't that into meditating? How has that affected your workplace?

**Todd:** Well, we have a very unusual culture and what we call our family, right? So first of all... I think everybody that I work with or create with, we don't really do work, we're really creators, so everybody I create alongside with are also my best friends. And we have a super deep connected relationship.

I think everyone would tell you that the success that we have created, which, I mean we run one of the fastest growing businesses in the United States and so it's like I think everyone would tell you that we attribute our meditation and group practices 100% to our success. We don't really strive for success, we live in an environment of thriving among each other as creators.

And so that's I, you know, I've founded eight companies and this is the only one that I've used this practice with and it's certainly the most successful business I've ever founded, I mean as quickly. And also as successful in terms of how people relate to one another. So I say about business or used to say about business same thing I'd say about dating. It would be an awesome thing if it didn't involve other people.

So the other people in business are the difficulty. So with these practices we have coalesced into this single-mind of thought. And we share this meditation practice. We had a circle of meditation last night about midnight with 15 or 20 people here. And so we share our practices with people all over the world. But our morning is protected, we think of our morning rituals as protecting the morning. So we don't meet for meditation until 10 AM.

Everybody else has their whole morning... I think the morning is such a sacred time for the beginning of our day. And how we set our day and how we set our morning really impacts the outcome of the rest of that day. That 1440 minutes, right? And so every minute is a new beginning and how we begin our day really determines in my view the outcome of the day.

So we meet at 10 and then from 10 to 11 or these days say go long as 11:15 or so, we have group meditation and other group ritual practices that include visualizations and gratefulness therapy and journaling and other practices that 22 of us participate together. It's not optional by the way. So you said what if people are not really into it.

Well, I mean as a part of the hiring process our job posting is 12 pages long. So any job posting is 12 pages and most of those 12 pages describe our ethos, our manifesto, how we think, how we live our life. So nobody applies without a complete understanding of who we are and what our practices are.

**Bret:** Great example of how to set a company culture and how to set a successful company culture for sure.

**Todd:** Well, it started from the first higher and so it's not like I don't know how you would apply this in an existing organization and come in and say, "Oh, we're going to start meditating every day." I'm not sure how that works, I've not done that. But this started very early and the practice has just become more developed. So, you know, the more we do it, the more we develop.

**Bret:** And how many people are also low-carb and follow that practice?

Todd: 100%.

**Bret:** Really? Is that in the 12 page document as well?

**Todd:** It describes our obsession with bio hacking. It's not a requirement but all are low-carb, or I would say probably half are ketogenic, maybe a little bit more.

**Bret:** It makes a lot of sense. I mean, if you're hiring and you want people at the top of their mental game, the people are getting the most out of their brains and their times, the two things that are probably most important are being fueled by ketones I mean being in ketosis and having a meditative practice. That makes a lot of sense.

**Todd:** I met almost everyone, not all, but I met almost everyone through the bio hacking circles or at conferences like this, we meet somebody and then they contact us and want to apply for employment, or, you know... And also our mail list because the nature of the business we're in, we're in the health-food business and we have

hundreds of thousands of people that we come in contact with and we put job postings out on social or to our email list.

So these are like-minded. I mean a wonderful thing as you had probably experienced, and this is really difficult, I'm talking about the challenges of a ketogenic lifestyle, it's very difficult for people to maintain a ketogenic commitment or even a low-carb commitment which is completely different than ketogenic.

But even a low-carb commitment, when they're surrounded with your typical break room or they're in a family environment where the family is not committed or they have children, there are all kinds of challenges to a low-carb or ketogenic lifestyle, just because the world isn't really fit to accommodate that.

We live, I live in a world where virtually everybody I'm in contact with on a daily basis is living same lifestyle I'm living and our break room only has... the only thing in our break room I think is probably MCT oil and bulletproof coffee and coconut oil and butter and high-fat supplements are about all that you would find in our break room. There's nary a doughnut or anything.

**Bret:** You are in a very fortunate situation. I mean one of the biggest challenges I have with people that I work with are those distractions and those temptations. I mean in the doctor's lounge there are donuts and muffins and bags of chips.

I mean that's in a doctor's lounge and you can imagine the average office in America, even for people who think they're relatively healthy minded, there's plenty of distractions that make it so easy. So controlling your environment is so important.

**Todd:** It is but it's very difficult for most people to do because they don't have the freedom of self-employment or they don't have the freedom of-- And most everybody there around is not only unhealthy, but many are chronically ill. I mean I have worked in traditional office settings before I was ketogenic and even then I was low-carb... It's impossible I found it...

There's always a birthday, there's always something, chocolate cake, and it just sits in there and you're going... I would go to the break room to get coffee or water and then there it is. And even if I was low-carb, you just had to peek at it, you just like take a little peek... but I'm never around that. I don't keep anything in my house that I don't intend to eat. So that's another trick, I mean you got to get your house cleaned out.

**Bret:** Great lesson, yeah, control your environment as much as you possibly can. And even if you don't have 100% control of your office, you're not the CEO, you're not self-employed, you can certainly control your space and communicate with your coworkers

so they know sort of what your health journey is and they can help you along the way. So another big challenge to remaining low-carb is of course alcohol.

Alcohol is such an integral part of our society and has been... and isn't going anywhere, I mean I think that's pretty clear. And it's a go-to for enjoyment, for relaxation, for treating certain problems that we may have above our shoulders and it can be very effective and very enjoyable and can fit into a healthy lifestyle.

But when you're talking about a low-carb lifestyle, there's a lot of concerns. So whether it's beer, whether it's whiskey, whether it's wine, the carbs, the sugar, the alcohol can all impact the production of ketosis, how we feel, so I'm curious about your sort of take first in general on how alcohol fits in to a ketogenic lifestyle specifically beer, hard alcohol, wine, and then we can kind of narrow it down and get a little more specific after that?

**Todd:** Well as you're aware, I'm in the wine business. So we'll cover wine separately. So I think alcohol... the most important thing to recognize about alcohol from my point of view being in alcohol business and drinking a lot of wine, the most important thing to recognize is alcohol is a very dangerous neurotoxin. And so when we think about alcohol, we need to think of it as a drug.

And it's a dangerous drug as many drugs are. So I like to think about dosage where alcohol is concern. Water and oxygen will also kill you in the wrong dose and so most things are dose-dependent, our life is about the management of doses. And alcohol is no different. And so for me on a ketogenic lifestyle, beer, whether it's gluten-free or not, is off the table, because it contains maltose sugar which goes straight to the liver and which is why you see people with "beer guts".

This is from a very specific type of sugar what's contained in beer. And so beer is off the table. Spirits for me are also off the table. And the reason being out... there are two types of spirits. So let's just break them into clear and brown. So the brown spirits contain sugar, many of them do. So the brown spirits are off the table. The clear spirits, particularly vodka and tequila, are clean, they're distilled, so they're pretty pure.

The problem is that they're 45% alcohol. So from my perspective the dose of alcohol is simply just too high. Most people don't have a drink or a glass of wine, they have several. And the underlying amount of alcohol inherent in the beverage you're consuming is really important from my perspective because remember I think alcohol is a dangerous neurotoxin.

Now in low doses alcohol, and particularly wine, but in low doses alcohol we know has inherent health benefits, but we know that the health benefits are also erased as the

dosage level gets too high. Particularly for women. There's a pretty strong correlation between high alcohol intake and cancer for women in particular.

And so I think is really important to regulate the dose. And if you're going to drink, this isn't necessary a plug for my wine, but if you're going to drink, wine should be your drug of choice, your alcohol drink of choice and the reason being is because red wines particularly contain just over 800 polyphenols and antioxidants and the most famous and well-known one is resveratrol.

And so wine can also be quite low in alcohol. And so I think if you're going to drink, my choice is a low alcohol red wine. White wines also contain just over 200 polyphenols and the difference being that the red wine gets its increase in antioxidant from its contact with skin. Skin and seeds are where red wine gets an increase in polyphenols.

**Bret:** So what about the argument that to get enough resveratrol from wine you need to be drinking gallons?

**Todd:** Absolutely resveratrol... I mentioned resveratrol is the most famous of the polyphenols. What I didn't say is that you're going to extend your lifespan from resveratrol from wine. Here's why. As you know, resveratrol has been really a red herring for the wine industry to tout the health benefits of red wine.

The fact of the matter is you couldn't drink enough red wine to get enough resveratrol as was demonstrated in animal studies alone. First of all there's no human proof that it extends life span. There is some proof in mice that very high doses of resveratrol delays mortality, but no studies in humans and again these dose levels are very, very high.

**Bret:** Good point. So if you want to be in ketosis, beer is off the table, dark spirits should be off the table.

**Todd:** You could drink clear spirits.

**Bret:** Let's talk about the clear spirits for a second because there's the common belief that I've heard over and over again, I've seen it written, I've heard patients saying it, that you are much more sensitive to alcohol when you are in ketosis, that you get drunk faster, you get buzzed faster, and two that there's still this fear that regardless of the sugar it can lower your ketones levels or kick you out of ketosis because of the congestion in the liver, there's too much going on, a competition in the liver to digest the alcohol and produce ketones.

So speak to that, about getting buzzed and drunk a lot easier and then sort of the ability to kick you out of ketosis.

**Todd:** I don't drink spirits and so I've never experimented with spirits. Never done any lab work around spirits, I can't really comment to that and I've never done any testing with them. So they're much higher in alcohol, I don't have any idea whether that would take you out of ketosis or not. I can tell you with our wines, which are sugar free and low alcohol, we have done extensive blood testing with drinking wines, including wine fast.

We did a five day wine fast as a part of an N of 1 experiment that we presented at the Quantified Self Conference in Amsterdam two years ago. So we we've done a lot of experimentation with fasting and wine and ketogenic diet as well as Dr. Dominic D'Agostino has also done independent blood testing on himself drinking our wines and has done social posting on his experiments and experience with our wine and he endorses our wine and recommends it to his followers. So with respect to this getting buzzed quicker, I don't really know.

Again I don't drink spirits and the wines that I drink are pretty low in alcohol. I have been in ketosis for a long time so I don't... I read that, I've heard that, that people experience this, it's not really been my experience, but I've been drinking a lot of wine for a long time and-- It seems to make sense though for a number of reasons.

In part you're generally probably just eating less. Because I don't recommend that anyone... you've got to get some food in your small intestine before that alcohol is there, because when we're serving, we're also drinking and so we want to make sure that we've eaten ahead.

**Bret:** And that's the other part that we haven't talked about alcohol, is what it does to your decision-making process, regardless of any benefit or detriment below the shoulders, again below the brain. In the brain it can definitely impair your decision-making process and then start making poor decisions about what you eat and then obviously it will affect your health and ketosis as well.

So I read that article that Mark Michelle from your group, from your team wrote about his N of 1 experiment of fasting, drinking your wine, testing his ketones in his blood sugar and after one glass of wine there's really no bump or no change in his ketones. After two it started to come down.

After three it came down a little bit more but still in ketosis. But then woke up the next morning still perfectly fine in ketosis. I thought that was a fascinating experiment. Is that what you're referring to or have you done even more experiments than that one?

**Todd:** Oh, we've done tons of experiments with blood testing in ketosis, whether it's on different food types or wine. Wine will not take me out of ketosis... our wine.

**Bret:** So your wine.

**Todd:** Our wines. I can't speak to commercial wines which oftentimes contain sugar, which will take you out.

**Bret:** So tell us the qualities in a wine we should be looking for to help us remain in ketosis, not affect our health detrimentally and still let us enjoy the social aspect and the benefits of drinking a glass of wine.

**Todd:** Unfortunately there's no way for you to really know, unless you're drinking our wine. It's not a plug for our wine, it's just there's no way for you to really know if there's sugar in wine unless it's lab tested. Even as taste professionals, we sometimes can't taste it. And so we do lab testing on every single wine that we drink and sell. And we're testing for a number of things but sugar is among them. So sugar in wines can range categorically from zero to as much as 300 g/L. And to give a reference point to that, Coca-Cola has about 108 g/L.

Bret: Wow, so even more sugar than Coca Cola.

**Todd:** Yeah, but at the far end of that spectrum. We're talking about dessert wines, ice wines, like super concentrated sweet wines.

Bret: We're talking about something Riesling... would that be an example?

**Todd:** No, Riesling typically ranges from 4 to 10 g of sugar per liter.

**Bret:** How about like a Port?

**Todd:** Ports are going to be on the higher side, it's going to be over 100 g for sure.

**Bret:** So for the average person drinking regular average wine, you know, Chardonnay, Sauvignon Blanc, Pinot Noir, Cabernet, does it any of that really matter? Should the sugar be about the same... thus the great variety?

**Todd:** It has very little to do with the variety. It has more to do with the winemaking style.

Bret: Got it.

**Todd:** And so whether or not the winemaker wants sugar in the wine or not. And so but sugars are higher than ever in wine as is alcohol. And so winemakers are leaving sugar behind in wine for a few reasons. Sugar is addictive as is alcohol.

Bret: Right. Powerful combination.

**Todd:** Also, you know, Americans love sugar. It's another reason that alcohol levels in wines have steadily risen over the last 20 years, 20 years ago the average alcohol content in wine was around 12.5%. Today it's almost 15%. And some commercial wines are 17%. Another reason for this higher alcohol content, same thing for the higher sugar content, is that it just appeals to the American palette, which has just been deadened from eating processed foods and excess sugar.

And so they can't taste anything, they can't taste the way you and I taste. But your palette will recover. So if you stop eating processed foods and you stop eating excess amounts of sugar, or I'd recommend eating any sugar at all. But if you eat a very low sugar diet and a very clean diet and get away from processed foods and chemicals, your palette will adjust, so your palette will actually come back alive and you can taste more nuance in food.

**Bret:** That's a great point and at that point the traditional wines probably will start to taste maybe even sweet to you whereas they didn't before when your palette was more deadened.

**Todd:** Our customers report that once they start drinking our wines, they can't really go back to drinking commercial wines, because of the way they taste. And people think that's just what wine tastes like, but actually most commercial wines are not really even wine.

**Bret:** What do you mean by that?

**Todd:** Well, they're filled with additives and manipulations... both technical manipulations as well as machine manipulations and a nasty range of additives. There are 76 additives approved by the FDA for use in winemaking.

**Bret:** So this concept that it's pure fermented grape juice is a bit of a romantic fallacy?

**Todd:** Well it's a marketing story that slick multibillion-dollar conglomerates who own huge wine factories tell you, the story about drinking from a farmhouse. You are actually drinking from massive factories in central California. And so these additives are necessary. You can't make wine in any appreciable quantity without the use of these chemicals and additives.

It's just impossible, it's too risky, just can't be done. So any wine you see in your grocery store in your typical wine shop are going to be filled with chemicals and additives. And it's the reason that the wine industry has lobbied and spent tens of millions of dollars in lobby money to keep contents labeling off of wine.

Wine is the only major food product without a contents label on it. And the reason it doesn't have a contents label is because the wine industry doesn't want you know what's in it. If it had a contents label it would look just like the rest of processed foods and have a whole string of chemical names and additives that you have no idea what they are. They don't want you to know what's really in wine. That's not what's in real wine. That's what's in the wine that is in your grocery store.

**Bret:** So what makes your wine different? How do you select the grapes, how do you select the processing that's going to make it clean and make it lower alcohol and make it more tolerable for people in general and certainly people living a low-carb lifestyle?

**Todd:** Well, the alcohol level is going to be determined by the amount of sugar at the time of picking. And so if a wine is irrigated, as an example, my company's name is Dry Farm Wines, as you know, all of our wines are dry farm meaning that they don't see any irrigation.

They're naturally farmed. When a wine is irrigated, and over 99% of US vineyards are irrigated, when a wine is irrigated you have to pick the grape later in the ripening process when it's higher in sugar to have proper flavor development, because the wine berry is filled with water from excess irrigation.

The reason you use irrigation is to increase yield and to cause the fruit to weigh more. Fruit filled with water weighs more. It might not be surprising for this all by the time. So the more it weighs, the more valuable it is. That's why you irrigate. But there are a number of negative effects from irrigation but the primary one is that the sugar levels in the fruit have to be much higher at picking.

And then when the sugar levels are higher in the juice, then that's more sugar for the yeast to eat and that creates more alcohol. So irrigation is the primary reason for higher alcohols.

**Bret:** And I remember you mentioning that basically every winery, vineyard in the United States doesn't meet your criteria, 99% don't meet your criteria.

**Todd:** We don't sell or drink any domestic wine. No domestic wines meet our health and purity standards.

**Bret:** Which I think is fascinating and ironic you could say that you are based in Napa, the heart of US wine production, yet you're not partaking in any of the wines in Napa. Did you get pushback or flak or you're sort of treated differently in Napa because people know you're not partaking in the local wines?

**Todd:** Probably not. My guess is that most people in the Napa wine industry are not following my health channels. So certainly people are aware of what I do. I don't spend a lot of time degrading Napa wines, so it's not really my place in the world. All I can tell you is that we don't drink US-based wines, because there are not any wines that meet our-- We're pretty health fanatic.

We have very strict health and purity standards on the wines that we drink that's just because of who we are. We're super health fanatics. I mean are there wines made in the Napa Valley that might be suitable to drink for most people from a health point of view? I'm sure that there are. But again our standards are just stratospheric and our customers depend on us for these standards of health and purity.

**Bret:** One of the other fascinating things about this, about the way the wine is grown, is how it affects the land. And I just interviewed Lierre Keith, author of the Vegetarian Myth, and just following the work of Joel Salatin and Allan Savory about how our mono cropping culture I guess you could say in the US is just destroying the land. Every time you till and you get rid of the topsoil you're just destroying the land.

And I got to say I've never really thought about that from a wine perspective because vineyard in general are so pretty and I don't know, I just never thought of it in the same perspective. But then you showed me some of these pictures of the vineyards that you go to and there's lush topsoil and there's lots of plants and native grasses where in a traditional vinery is just dirt and it just looks like such a more vibrant area and such a better area to preserve the land.

So there is now more of a movement to do this in terms of cattle and natural grazing and trying to get that to become more popular here in the US. Is there any sort of movement to talk about how the wine is impacting the land and how this way of farming the grapes is so much better for the land and therefore should be more plentiful?

**Todd:** There is a huge discussion about it and there's also a huge discussion in California about great farming and irrigation because of the droughts in California. But on the farming side, I mean we see it in Europe, or certainly on natural farms. You've traveled throughout California, you noted that you look at a vineyard and it's just barren and then there's this great vine above it, but this is basically brown, it looks like the moon, it's like lava scape.

Everything is dead, right? And most of the time it's been killed with Glyphosate and Roundup. Roundup is the number one used herbicide in US vineyards. So on a natural farm, natural grape growing, you see under the vines it's a quite lush place, right?

Beans and flowers and weeds and grass and the natural farmer also doesn't plow or turn the earth, because when we turn the earth...

So in a natural vineyard you have all the plant life and insects above the surface of the soil, then you have what's called the mulch level and then under the mulch is where it's decaying the topsoil. In the mulch and under the mulch into the earth are on any given vineyard millions of organisms that are living there. This is what we would call living soil. And so when you turn that soil, like if you were to plow it or turn it over, then all those organisms get exposed to the sun and they're killed.

So the natural winemaker, the natural wine grower, isn't trying to get rid of insects. In fact many growers plant herbs or create little butterfly hatches and they want insects to come, they are proud of their insects, this is nature's logic to have this figured out right. So they're not trying to kill anything, they're trying to make everything grow. The other thing that you see on natural farms is a return to polycultural agriculture.

So they're not just not growing just grapes but there's orchards and there are olives and there are farm animals and livestock... and you see bees... Always bees on natural farms. And so you see a real focus on biodiversity and a polycultural environment. As opposed to-- you know, everything was pretty much polycultural until the 1920s.

**Bret:** Right, there was no such thing as a wheat field or a cornfield or a vineyard. It was just where everything grew together.

**Todd:** And so these family farms that we tour, you know, 100 a year are like this. In fact I mean I just took a major health blogger influencer on a trip to Italy a few months ago. And she is about 15 million followers a month, so she has a pretty wide reach. They were just shocked, like "I can't believe who these people are and how they live and how committed they are" and you know they're just activists for the land and these small family farms where everybody that lives on the farm, also works at the farm and most of what they eat is produced at the farm.

And so it's just a very gentle way of life and just a terrific culture, that unfortunately you wouldn't see it in the United States. I'm sure there are some folks here who farm this way. Certainly most of the wine farming I'm exposed to in the United States is not done like this.

**Bret:** It's sort of an interesting paradox for me, because on the one hand I've got the little bird in my ear saying, you know, "Buy locally, eat locally", but then the other bird in my ear is saying, "Take care of the world and take care of the environment and buy clean products." And unfortunately those two don't seem to be coinciding at the moment.

**Todd:** There's no question that they do not equate and there are many problems with both scenarios. We live at the middle and something we think a lot about, we leave a carbon footprint when we bring wine across the ocean. The fact of the matter is that's only way we can get healthy pure wines we want to drink. But yeah, we think a lot about these kinds of things, it's incongruent to all of our standards, but like most of life we have to make compromises.

**Bret:** Well, Todd this has been a fascinating discussion going through your journey to ketosis, how you run your company, the ethos and the culture of it. How that plays into the wine you choose to bring in and produce and how that affects everything from not just health but to the land and the decisions we make in life. So I want to thank you so much for joining me today and please you have any last comments to leave our listeners with? And then of course where can they find you to learn more about you and about Dry Farm Wines?

**Todd:** My advice to everyone is share more love, tell more people you love them and live a gentle life and release the things that are not meant for you. That's my general advice. Dryfarmwines.com is our website and tells our whole story and we're dryfarmwines on all social media.

**Bret:** Very good, share more love. That's something we should have talked more about but I appreciate ending in with that, that's a great way to end it. Thank you so much.