

Bryan Schaaf:

Back here on the meat speak podcast powered by the certified Angus beef brand. Sitting in sunny Ohio City, which is officially part of the Cleveland zip code, but let's be real, Ohio City is it's own nest in the world of the greater Cleveland dynamic. Sitting across from me is a great friend, who went I first met him the first job that I knew him, although he is a chef, although he is now an author, was Larder master, which is something that I always thought would be fantastic to have on my business card. Chef, author, and a new book that just came out Koji Alchemy from Chelsea Green publishing. Jeremy Umansky, how you doing sir?

Jeremy Umansky:

Hello Bryan, what's going on?

Bryan Schaaf:

Man. I'm just sitting outside your fine establishment, Larder here on west 29th in Ohio City and I know the book came out. My copy officially arrived in the mail. The whole world wide pandemic thing didn't do any favors for getting packages delivered on time. So my official copy of Koji Alchemy showed up, I noticed, about a week later than some of my friends deliveries, but never the less it is here. It is glorious. And we wanted to take some time and really sit down and pick your brain about this subject. If you Google Jeremy Umansky on YouTube there are Ted Talks that he's given. There are lots of different speeches that he's given on this strange mold. But man, tell us where it all began in terms of... this is still, I guess, in the big picture, a pretty recent discovery that you've been doing with this.

Jeremy Umansky:

Yeah. We like to frame it, at least in the western world. Right? Because here in North America and South America and Europe we're give or take 2,000 years late to the Koji party. So, I guarantee anybody listening has a Koji derived food in their house and that would be soy sauce. Whether you've got a little packet from the little take out spot around the corner or you got... most of us have several bottles because we buy one, we forget we buy it, and then we buy another one thinking, "Oh. I'm going to put this marinade on this steak. I need some more soy sauce."

Jeremy Umansky:

So, we're all familiar with that and Koji is the organism responsible for making things like soy sauce. Or if you like to drink things like sake or any of the Chinese or Korean style wines. It's responsible for making miso and Gochujang and Chinesejang, all these awesome Umami packed foods Koji is responsible for. Literally somebody can make the argument that a lot of the civilizations throughout Asia and Southeast Asia wouldn't have developed the way they did if it weren't for this mold. It's that important. And we're stoked to use it now.

Bryan Schaaf:

Excellent. I want to take him and I want to go back to the very beginning, but before we do, we're sitting outside your restaurant, Larder Delicatessen and Bakery, right? Or Larder DB on the Instagram if you want to follow what's going on here. Koji mold is so prolific. You guys have an entire menu... I mean, how prevalent is the use of this in the dishes that you guys have?

Jeremy Umansky:

Covid's thrown a wrench in a few things. So, our menu is not what it was going back to two and a half months ago, but generally speaking I would say at any given time 65, even 75 percent of the things that we're making and putting out from our bread to our capastrami, different fermented pickles, these different sauces and Umami bomb paste that we make, they're in a lot of what we make. The majority of the foods we're making, we're using Koji in it one way or another.

Bryan Schaaf:

Excellent. Well said. One of the food specifically, although I don't believe its... I don't know if it's actually ever been on the menu here, but when I hear you talk about Koji and I think about at least the first wow moments was developed around scallops, right?

Jeremy Umansky:

Yeah. Yeah. So, I was working with Jonathan Sawyer and he had wanted me to make some miso and that was my first introduction to Koji. So, I did some research and at that point I'd already been curing meat and making all different types of ferments and working with wild plants and mushrooms and all that stuff and I had been working as a chef for quite a while at that point too and I had thought I kind of saw it all with this realm of fermented foods. I was doing some really weird funky things at that point. Fermenting out clam guts to make various liquids to garnish crudos at the restaurant. And when I was asked to make this miso or this miso-like product I realized I need this mold.

Jeremy Umansky:

So, I had to go through the process of sourcing it, learning how to grow it, learning how to use it, and after I comfortable with growing it I kind of realized I could grow it in ways that all of the classical text about using it said not to do. I was using mushy overcooked rice to do it, whereas classically you need perfectly steamed rice that after it's cooked it's still as free flowing as raw rice is. Right? It moves, the cornels don't stick. It's just perfect more or less. And I was doing the exact opposite and it was working.

Jeremy Umansky:

So, I started thinking one day, "Well, if I can grow this on busted rice couldn't I grow it on rice flour or another starch flour?" So, I started looking at what the starch composition of rice was and seeing what food Koji preferred and types of rice it liked and lo and behold I decided to do this litmus test and that was if I could pick something that I knew would get screwed up based on the parameters needed to grow this mold, which is relatively high heat, ambient heat, about 90 degrees and high humidity, 90% relative humidity, maybe even a little more, if I could dust a scallop with a starch coating and the mold and get it to grow without the food spoiling I knew I was on to something.

Jeremy Umansky:

And that's exactly what happened. I thought it was going to be a complete failure, but the mold grew and formed this bio protective layer around the scallop and it didn't spoil and right away we started putting it on the menu. And from there opened up, well, if it works on this, this extreme end charcuterie, the gloves are off.

Bryan Schaaf:

Yeah.

Jeremy Umansky:

Let's do it. And Koji's powered by these awesome things called enzymes. Enzymes, a lot of people, especially in the culinary world don't understand their role or their importance and enzymes are... should I wait?

Bryan Schaaf:

No. Your good. I think we're all right.

Jeremy Umansky:

Okay. Enzymes are really important for flavor creation. Essentially what they are are they're specialized proteins and what they do is they make our foods more delicious. They also break apart our foods. Our body uses them to digest, but in Koji's case it uses them on the food before you eat it, frees up all these delicious umami compounds and simple sugars and these incredible aromas that come from the different fats present in a given food and it makes things a million more times delicious than it could ever be on it's own.

Jeremy Umansky:

So, being able to take advantage of that for charcuterie, for age accelerating different cuts of meat, we have traditional styles of aging, both wet and dry, this is a whole new... we've got a three sided coin now when it comes to this. It's really we're able to start pushing envelopes in ways it hadn't been pushed before and that's what's been super, super fun.

Bryan Schaaf:

Excellent. If you remember what it was like taking the leap eating that first scallop... I always think, I'm from Ohio, so I don't do a lot of sea food, so I look at things through fresh eyes a lot of times. I always think I wonder what was going through the guys head who ate the first sea scallop or how ate the first oyster because they don't necessarily look like something you'd want to eat. Right? What was that leap of faith like? Do you remember? Did you have any hesitation?

Jeremy Umansky:

Right. Right. Eating that first scallop that I left at room temperature and high humidity for two days, for me-

Bryan Schaaf:

There you go.

Jeremy Umansky:

So, what was it like eating that first scallop that I left sit at 90 degrees in high humidity for two days? For me actually I didn't even have a second thought about it. It looked good, it smelled good, and I just assumed it would taste good and it did. Because for me at that point I had already eaten fish that was 10 years old and fermented out. I had a wonderful experience to eat a style kimchi called wedding kimchi. So it's a traditional style that's made throughout the Koreas and when a daughter's born into a family the family gets together, makes a batch of kimchi that is then gifted to her and her husband on her wedding day. So, the one I ate was almost 30 years old and literally had been buried in someone's back yard in Korea for 30 years.

Jeremy Umansky:

So, this concept of this weird kind of gross really didn't enter my mind, but I will say when I went to go feed it to Jonathan and Brett Sawyer and a few of the other people at [Terintina 00:10:23] at the time people were like, "Okay. We know you ate it and you're okay, but you eat and make some weird things. So, of course you're fine. You've got to promise you're not going to kill any of us."

Jeremy Umansky:

So, of course I said, "Sure. I promise." And everything ended up working out. I remember the look on Brett's face. He was just like, "I don't know man. I don't know if I can do this. This is against everything that is telling me that it's okay."

Bryan Schaaf:

The rest is history though.

Jeremy Umansky:

Yeah.

Bryan Schaaf:

I mean, if you could talk about... it's one thing to have a mold that you can apply in this case to proteins and it changes the flavor profile, it also has a preservation element to it as well, but you've said many times, and I've known you for a number of years, about the idea of being able to feed the world and feed the world really good tasting things. And we've seen this thing go to work in practical applications in things like brussellas and things that generally take a long time to get to their finishing state to sort of accelerate them.

Bryan Schaaf:

Can you talk about it from that standpoint of not just this is a really cool trick to make things that you can eat a scallop that's been at room temperature for two days, but really the practical application of what you could see this blossoming into over time?

Jeremy Umansky:

Yeah. So I think some historical context is important for this and what we have to think about is let's look at the soy bean, one of the things that this mold was originally grown on. And fresh soy beans, A, are slightly toxic to us, much like kidney beans are, that sort of thing right? We have to cook them a certain way to flush those toxins out. So, they have the potential to poison you pretty well, or pretty badly I should say, and they're nutrient dense, but a lot of the nutrients are not bio available, meaning your body can't break them apart and make good use of them when you digest them.

Jeremy Umansky:

So, Koji comes along and it's able to do this. It's able to take something that's mildly toxic and is not very agreeable for our digestion and our nutrition and completely flip it around and make it ridiculously dense in bio available nutrients and create a level of deliciousness and Umami. I mean, literally you eat a little bit of miso, like a fingertip of miso, that's same Umami that you get off of a fire grilled steak, that level of Umami is there and we're talking a bean to a cut of meat.

Bryan Schaaf:

Yeah.

Jeremy Umansky:

So, the transformative ability and properties of this is just absolutely stunning. So, when we look at how can we go ahead... you see, I'm a firm believer of that good food is an inalienable right. That everybody should have access to good food and when we say good we don't just mean foie gras and caviar, right? We mean food that's nutrient dense in bio available nutrients. Food that's accessible, it's priced good. And that the people selling it are also making a good wage doing that. These are the things that we talk about when we say good food. So, all around we have these great win, win, win partnerships. That's the goal.

Jeremy Umansky:

So, when we can use something like Koji to take cuts of meat that may be typically too tough or undesirable because a lot of work has to go into cooking them or a lot of knowledge has to go into being able to know how to work with them, right? And we can use Koji, we can use it's enzymes to not only create delicious flavors in there, but also as these enzymes work, they literally on a physical level start to break apart and tenderize things too. So, we're able to take tough off cuts, undesirable cuts, and make them extremely delicious and also make them more tender so they're more mass appeal. And in doing that, with little investment, we can create more fair access to these nutrient dense foods.

Jeremy Umansky:

I mean the nutrient density of something like beef is fantastic. I mean, fats, proteins, and there are minimal carbohydrates in there. But things that are really important for our nutrition, we can really, really get out of these foods if people have good access to them. And being able to use Koji to do this versus industrial chemicals or various other things that people have attempted, adding fillers and wood pulp to salamis and all sorts of stuff, no, we don't need any of this. We can very inexpensively and with minimal effort look at ways that we can scale this up and provide fair access to these foods across the board. And that's something that we feel is super, super important, begin able to do that.

Bryan Schaaf:

Well said man. Well said. One of the things that I want to make sure we spend a good amount of time here is the book itself. It seems like I get the-

Jeremy Umansky:

It's crazy.

Bryan Schaaf:

It's amazing. It's amazing. I get the pleasure of getting to bring a lot of folks to Cleveland, right? Sort of finding us beef where 40 minutes south of Cleveland... Cleveland is home to us and so I have so many chefs that come in that actually request, do we get to go hang out with Jeremy at Larder? And true to form, you guys have been open for two years, you've gotten two James Beard nominations, which is certainly nothing to sneeze at.

Jeremy Umansky:

No.

Bryan Schaaf:

Tell me about the book itself. A lot of folks are coming here wanting to pick your brain. Renowned chefs around the country coming here to pick your brain, to better understand what this is all about.

Jeremy Umansky:

Now you're putting me on the spot now. I'm flushing the color of that stool over there. So, really quick, I'm going to read a little excerpt out of this book. So, one of the things we looked at in this book is we wanted to build community around Koji and so we have 40 different contributors. Everybody from PHD researchers to chefs to small scale fermentors to Koji spore producers in Japan have contributed, and one of my favorites is in this aging meat and charcuterie chapter and lo and behold it's Diana Clark, the beef maiden-

Bryan Schaaf:

Frequent podcast contributor.

Jeremy Umansky:

Frequent contributor. I mean, she's a bovine anatomist, she's awesome, and she wrote this great essay for us, it's called Koji compared with traditional aged meats, and on just the intro here it says, how do we know that Koji aged meats can compete with traditional dry aged meats? Well, we tested them with Diana Clark, a scientist in bovine anatomist, who for many years has worked with certified Angus beef. So, Diana goes on to talk about the merits of looking at Koji to age foods and being able to do it on these great economic scales that compare to traditional ways of aging. It can create a product that goes to market quicker and any time you do that without sacrificing quality, which means texture, appearance, flavor, deliciousness, when it comes to food without sacrificing those things, that's a huge win and opens it up for a wide variety of people to be able to access it.

Jeremy Umansky:

So, this book was a huge undertaking because as much as we love CAB, we talk about using this with vegetables, we talk about using this with dairy and eggs and all sorts of things. I mean, there's so many awesome things that you can make with Koji. I think one of the things we get when you guys come by and you bring a group of people in, one of the things that always raises quite a few eyebrows and we get a few oh my goshes from is our pastrami essence, which my business partner Kenny Scott hates the name pastrami essence, but... see, when I was developing this product I was like, "This is the essence of pastrami." And then I had this flash in my head of a horrible cologne add from the late 80's or early 90's just like pastrami essence, this beautiful woman and chiseled guy just rubbing pieces of pastrami on their bodies and smelling each other. I think it'd be fantastic.

Bryan Schaaf:

It's primordial.

Jeremy Umansky:

Yes. So, extremely sensual. But we're able to take a byproduct, the steaming liquid from the pastrami, which has the bits of spices and little bits of brisket that fall off on it, we're able to mix that with Koji

that's growing on rice or barley and salt and we create an amino sauce that rivals almost any soy sauce I've ever had and any Worcestershire sauce I've ever had and so a lot of chefs come in and were like, "Well, this is something you pour down the drain?" And they're like, "Yes. We pour this down the drain." Put a bottle down, we tell them we charge nine dollars for it and their jaw drops and they open it and they smell it and they taste it and they're like, "This is liquid pastrami gold. You could sprinkle this on fries instead of malt vinegar" because it's got a little tang to it the way we ferment it. You can garnish a baked potato with it. You could marinate a steak in it. You could brine your pastrami in it.

Jeremy Umansky:

We've made vinegarette with it for salads. The use of it is just so broad and fantastic and seeing that we can use Koji to manipulate it in this way using traditional methods at that too-

Bryan Schaaf:

Yeah.

Jeremy Umansky:

... we don't have roto-vaporators and ultrasonic homogenizers here and that sort of thing. As much as I'd love some of the equipment we don't have it. We use traditional means to produce these foods. So, it's really cool seeing people get into it and really see the proof in that pudding what Koji can do.

Bryan Schaaf:

Yeah. That's wild. Talk to us about even the procurement of Koji. I know chef Gavin Pinto-

Jeremy Umansky:

Yeah.

Bryan Schaaf:

... who's also in the podcast every so often, works for certified Angus beef, he's very much riding the Koji train. I think he gets his Koji from Amazon.

Jeremy Umansky:

Yeah.

Bryan Schaaf:

If somebody is looking to kind of get started where do you send them?

Jeremy Umansky:

Yeah. So it's really interesting because you can plug in at any level that's appropriate for you. So, if you're someone... and the interesting thing is too, this book, the way we wrote it, my co-author Richard Shih and I, the way we wrote it, the way we wanted to approach this was culinary professionals, seasoned chefs who've been doing this for decades have about the same amount of Koji knowledge that someone who never heard of Koji has because people aren't familiar with it. We're familiar with some of the things that are made from it, but we don't ask any chef how they make soy sauce. We say, "Oh, they're fermented soy beans" but there's a lot more to it.

Bryan Schaaf:

Yeah.

Jeremy Umansky:

So, we wanted this book to have this broad appeal for both professionals, home enthusiasts, and people new to the fold. Anybody that had an interest in it. So, with that said, you can order spores from a producer in Japan or domestically there's GEM Cultures, they're a company out of the west coast, I believe it's San Francisco. They sell the spores which is kind of like the seed of the Koji. And you can get those and sprinkle them on cooked rice or barley or virtually any starchy medium and grow your own.

Jeremy Umansky:

You can get like chef Gavin's getting these dry blocks of Koji inoculated rice. You can find those on Amazon or a Japanese specialty market or even some Korean or Chinese specialty markets. You can also online find these pre made base Koji products. The two most prevalent are amazake, which is if you add yeast to amazake you then have sake or any of the other styles of Asian alcohols or Shio Koji which is kind of like amazake but it has salt in it. These are kind of like porridges and they've got all of the flavor of Koji and all these active enzymes that will transform your food in them. So, you can get those pre made or you can make your own. There's all these different ways you can jump in.

Jeremy Umansky:

We did a demo a little bit ago that was like, well, how does someone who has no reference for this, no experience in this, they want to make something like miso, what do they do? So, we source some pre grown Koji from Amazon and we opened up some canned beans and had some table salt and it was that easy. Mix it together and then forget about it for a few months to a few years depending on what your goal is.

Jeremy Umansky:

So, it's really easy and what you have to think about too is people with far less understanding of the science, the technique, and the method behind producing this, with very little access to technology... when I say technology I mean the flow of information, right? Looking something up with your computer in your pocket, your phone, also refrigeration technologies and this sort of thing that helps us keep our food safe. People without any of this have been working with this mold for thousands of years. There's archeological evidence that puts it back over 9,000 years in Northern China and it's most likely predates that by a couple thousand years, we just don't have the concrete evidence for that yet.

Jeremy Umansky:

So, it's been used for a long time by people at one point that had no idea what they were doing. So you can do it at home. It's that simple.

Bryan Schaaf:

You have a refrigerator just in case.

Jeremy Umansky:

It's really easy. There's great ways to plug in and the book is full of information. The book, we wanted people to be comfortable with the mold and learn how to grow it and then use it. So we don't



necessarily address... there's a couple mentions of sourcing pre made Koji products, but the goal of this book was to teach you how to make your own. So we do have some resources in there for finding the pre made things and working with them, but it's so easy to plug in any way you want to.

Bryan Schaaf:

Well said. Well said. I guess in addition to the book, and it's funny that it came out when it did, and I don't know if funny is necessarily the right word, but of course book release party was planned and all these things-

Jeremy Umansky:

We can use the word funny.

Bryan Schaaf:

It's not too soon anymore.

Jeremy Umansky:

As well as laugh out loud and ha ha funny.

Bryan Schaaf:

Well, I mean, you knew when the date was coming. It was here and then of course the entire world kind of shut down.

Jeremy Umansky:

Yup.

Bryan Schaaf:

Everybody has had to kind of navigate the last two, two and a half months in their own way and can you tell us a little bit about how you guys have been dealing with it in general and then I mean, has the book release just kind of been maybe a nice distraction or a nice reminder of normalcy when it did come out?

Jeremy Umansky:

So, based on some of the things that my co-author Rich and I have been hearing from people that this has been such a welcome distraction. So many of my colleagues are out of work or scrambling to keep work right now. A lot of them have come out and said, "This book has given me something to do and keep my mind off all the crud that's going on now with Covid. The sleepless nights I've been having trying to figure out how to pivot my business. Making miso's super relaxing. I used your book to make some." I'm literally hearing these things on a daily basis and it's been incredibly flattering and I'm so grateful that people have been able to use it as this. Now we're also noticing people have some more time at home, both chefs in their food industry and cooks and dishwashers, everybody, servers, everybody, but people who work from home and have office jobs and that sort of thing.

Jeremy Umansky:

So I've been hearing from wide swaths of people who are like, "This is actually coming at a fairly good time for me. This is something I've been wanting to get into for a while and I actually have a little bit of time to do it. It's relaxing. I end up with really cool and delicious things for me and my family. I'm going

to be able to port all these back to my restaurant once we get up and running the way we need to be." We're getting a lot of positive feedback.

Jeremy Umansky:

So, as I said, it's ha ha funny and laugh out loud funny kind of at the same time, right, where good and bad put together makes gray. We're all in this weird gray area. So, it's been interesting to say the least. And Rich and I talked about this at great length last night actually with somebody. We're just super grateful that this book can be bringing pleasure to some people that may not have it right now.

Bryan Schaaf:

Yeah.

Jeremy Umansky:

And that's the whole goal of Koji building community.

Bryan Schaaf:

Yeah.

Jeremy Umansky:

Coalescing around something that strengthens all of us and pushes us all to be creative and inventive and do better and be self sufficient and secure in what we're doing too. That's a huge thing. The food sovereignty... pardon me. The food sovereignty, the control that Koji gives you to create the most delicious food ever is unparalleled and something like that as a civil right, as a civil liberty is just fantastic. And to be able to have more control than ever I think is a fantastic thing.

Bryan Schaaf:

All right. Well said. Let's get to the most important thing, right? Tell us, where can they get the book?

Jeremy Umansky:

So, first and foremost we like to tell people to support their local book seller. No matter where you are give them a call, search them out in Google, some of them in various places around may still be closed to the public, but behind the scenes they're able to order your book and ship it to you, so check them out. There's also the big ones like Barnes and Nobel, Target, and Amazon you can also get. We're getting a bunch of copies here at Larder, so anybody in the Cleveland area can stop in there and also directly through the publisher. The people at Chelsea Green publishing are awesome. It's a small employee owned publisher. They use recycled paper and all these just wonderful things. They're in idyllic Vermont.

Bryan Schaaf:

Pardon me.

Jeremy Umansky:

So, there's a lot of ways you can get it. Whatever works for you go for it. There's also an Ebook too. So if you happen to be somewhere where you can't get shipping or that sort of thing you can get the kindle version or the nook version, whatever it is.

Bryan Schaaf:

Excellent. Can I make a request?

Jeremy Umansky:

Please.

Bryan Schaaf:

I would like an audio book and I would like it to be read by your business partner and co-chef Kenny Scott.

Jeremy Umansky:

We can do that. We can do that.

Bryan Schaaf:

With no bleeps or edits or anything like that. Just turn him loose.

Jeremy Umansky:

Yes. Yes.

Bryan Schaaf:

One last thing, just because, I mean, to flip through this book and to look at the page with all the forwards on, I mean, what a list of people who have lent their name to the credibility of the book. Everybody from Dan Barber to Daniel [Belou 00:30:39] to our good buddy Rick [Tramato 00:30:41] in Chicago. I mean, even now, do you look at that and think, holy cow, this is a pretty... I mean, do you ever just catch yourself looking at it thinking like, okay, this is real cool?

Jeremy Umansky:

I think we should use the bleep button. Yeah. I mean, I could have never imagined, but it's just... pardon me. It's just a testament of how impactful Koji can be. I mean, that's what it boils down to. Rich and I, with that, we're just over the moon. It's just mind blowing.

Bryan Schaaf:

It's very, very, very impressive. Jeremy Umansky from Larder Delicatessen and Bakery here in Ohio City just across the Cuyahoga River from the land, right? But do, do, do please, please, please check out Koji Alchemy. It's funny, alchemy's one of those words that I actually ended up Googling it. It's one that I've always heard of, but as I was getting ready to talk to you I thought I don't actually know exactly what alchemy means and one of the words that kept coming up was magic. And when you really think about everything around Koji and food and the works that you guys are doing, it really is magical in its impact on the food, in its impact on society, its impact on the world. I guess having the long view, which is one of the things I've always appreciated you coming from. You run a farm in upstate New York.

Bryan Schaaf:

I mean, you've had all these different experiences to shape you. I guess what is a message you could put out there for folks who maybe are beginning to, hopefully, fingers crossed, come out of what's been going on in the last two months, Koji related or non-Koji related?

Jeremy Umansky:

Just do what you can to strengthen yourself and your community. That's it. And don't be afraid to ask for help at anytime. Your neighbors, a stranger, the great people at CAB. We all have to work together to come out of this. So, that's what needs to be done. That's it. Hang in there. Take a deep breath. Do whatever you can and ask for help when you need it.

Bryan Schaaf:

Excellent. Well said Jeremy Umansky. Can we shake hands? Do we need a fist bump? I mean I don't know what protocol is.

Jeremy Umansky:

We got hand sanitizer.

Bryan Schaaf:

That's right. If this is your first time tuning into the meat speak podcast powered by the certified Angus beef brand, know that you can find it across Google Play, Apple, Spotify, or by visiting [certifiedangusbeef.com/podcast](https://certifiedangusbeef.com/podcast). So, Jeremy Umansky, Larder Delicatessen and Bakery, two time James Beard nominee, and author of Koji Alchemy, which you can find across most of your major book platforms. Thanks for taking time brother.

Jeremy Umansky:

You're welcome. Thanks for having me.