



Episode 981: How Kombucha Connects Us to Ancient
Wisdom, Hormone Balance, & Microbial Magic
With Kombucha Kamp

Child: Welcome to my Mommy's podcast.

Katie: Hello and welcome to the Wellness Mama Podcast. I'm Katie from wellnessmama.com, and I am back for round two with my friend Hannah Crum, who is the author of the big book of Kombucha and the founder of Kombucha Kamp, both with a K. And in this episode we talk about how kombucha connects us to ancient wisdom and it helps us with hormone balance and creates microbial magic.

And Hannah is the expert on this topic. She's affectionately known as the kombucha mama. And she has been brewing kombucha for a very long time, creating fermentation kits so that other people can as well, and educating people about the many, many benefits of fermentation and how we have lost some of these in our modern lifestyle that doesn't rely as heavily on fermentation for food preservation anymore.

And I think after this episode, you will have a much deeper understanding of the beauty of these products and how to make them at home for pennies on the dollar. So let's jump in.

Katie: Hannah, welcome back. Thank you for being here again.

Hannah: Thank you.

Katie: Well, if you guys missed our first episode, we got to really delve into the world of microbes and I learned a lot, as I always do from Hannah. And in this episode I want to go even deeper and talk about how kombucha and really all ferments can connect us with ancient wisdom, can help our hormone balance and our, and create microbial magic in our lives.

I know that there's so much we got to start talking about in the first episode, and you call yourself a farmer of microbes, which I love. Can you explain what you mean by that and how you view fermentation as a sacred practice?

Hannah: Absolutely. You know, we think of farming as something that happens in the dirt and what lives in the dirt. Well, microbes do, of course. So in a way, I think all farmers are bacteria farmers, they have that consciousness about it. And I would say what's really exciting about living in these times is the resurgence of that ancient wisdom through practices like regenerative farming and things like that.

And really understanding how important and vital the health of that soil is because all of these are metaphors. The macrocosm of the microcosm, the soil for humans is in our guts. Uh, that's sort of where our soil lives. And so when I say I'm a bacteria farmer, I'm not planting anything in the ground, but rather I am going to what that organism needs.

So this is one of my little, I've cultivated a whole range of sayings and aphorisms that come from living this lifestyle. And so one of them is if you give an organism what it needs to thrive, it will. And that applies to humans just as much as to our microbes. And so, as a bacteria farmer, it's really understanding observation. And here's the reality and the frustration with working with microbes and farming is that it's never a hundred percent, you don't necessarily always get a hundred percent yield. And yet there's these feedback loops that are constantly teaching and informing.

And in fact, what I've seen, because we do DNA sequencing on our cultures is that they've evolved over time and they've evolved because of the environment they're in.

And so by having four cultures together, all of our cultures have picked up the very best elements of each of them. Even though we do take pains to keep them separated and use different utensils, there's just a natural cohabitation that occurs. And so when you start cultivating ferments at home, you're engaging in this same ancient practice where you are cultivating your own microbiome at home that includes your fermented foods.

And this is why I think making them is so important is because whatever issues are going on with you, there's a way that you can communicate. So, like for example, when I tell people to stir the tea for their kombucha, I say Stir in hope. Stir in dreams. You can, you know, whisper what's going on or what it is you need to heal or how you want things to change. And this relationship, this process that you then engage in really is magical, because the microbes respond. You know, we could even say, is the yeast cultivating us or are we cultivating the yeast? Because they have found many ways to encourage human beings to give them a really safe nurturing space, whether that's bread, beer, or whatnot.

Katie: And I know in today's world we hear a lot of talk about metabolic health and we know that over 90% of Americans at least have some marker of metabolic dysfunction. And that this seems to be on the rise. And it seems like when it comes to sugar and fermentation, there's a lot of misconceptions about this kind of in the realm of metabolic health and that perhaps a lot of people have thrown out the baby with the bath water when it comes to fermented products because they're worried, potentially rightfully worried about excess sugar consumption.

So walk us through what we need to know about when it comes to fermented products and sugar.

Hannah: So sugar is the backbone of life. Your DNA is built on a sugar phosphate backbone. So, sugar is ubiquitous and it's a ubiquitous food source. Animals seek out sugar, human beings seek out sugar, microbes seek out sugar. And so when we say sugar, what are we talking about? Because it can come in many forms and I think that you know, the, the black and white, if you will, if that's a verb of uh, terms, right? So sugar, bad, sugar, good, right? But we don't distinguish, what are we talking about?

So what I'm referring to is sugar that is created by a grass that human beings have been harvesting for 5,000 plus years. And that would be sugar cane, um, which is sucrose, which is a disaccharide, so it's a complex carbohydrate.

And the yeast excretes invertase, which is an enzyme that cuts that carbohydrate in half. So now you have the fructose and glucose in free form because the microbes need the simple sugars in order to process them. And you could say this exact same process is what is happening in our bodies when we're consuming sugar such as table sugar, right? If we're just consuming table sugar, um, that's what could be going on.

And so then our bodies have to exert through insulin production, the ability to break down those complex carbohydrates. And so when we combine complex carbohydrates with fermented foods, and there have been some human trials conducted showing this, there's a lower spike on the insulin because those fermented foods are helping you to process those complex carbohydrates.

Unfortunately, in our processed foods world, there are so many, um, you know, low calorie sugar substitutes and those are made in labs. They are shown to cause cancer. They are sometimes they're not even going to

leave your body ever. And so I think unfortunately we've been tricked into thinking, oh, these are better substitutes than the sugar that naturally occurs in the world because of the the lack of calories, when in fact, when we consume the foods that our ancients have, we already have pathways for dealing with those as opposed to then never feeling full or never, um, having enough and not getting um, what we need out of it.

But I think that, from a commercial standpoint, unfortunately for kombucha, we are required to put the final sugar post fermentation as an added sugar, even though we're not adding sugar after the fermentation. And that's because sugar's used in the primary fermentation process. And so this can be really confusing to consumers 'cause they'll go, oh, I want the kombucha with no added sugar.

And I'm like, well. All kombucha has sugar. That's how it's made. If you're looking for the one with no added sugar, you might be consuming a kombucha from concentrate, uh, where they've, you know, created a vinegar added water and flavorings and you're essentially, I always say any kombucha's better than no kombucha. But from a sort of purist standpoint, the one that's closer to one you might make at home is obviously going to have more nutritional value. And those are going to say added sugar on the label.

Katie: And I know when we make it at home, we also actually have a little bit more control on leeway in how much of that sugar gets fermented out and how much is like recognize the sugar in our body. Because my understanding, and you can explain this much better than I can, is that the scoby is essentially using the sugar as fuel for the fermentation.

So the longer it ferments, you end up with a more sour, potentially kombucha, but less sugar. So if someone is trying to really watch their sugar intake, could make it at home and doing a little bit longer of a ferment, and then maybe even doing a secondary ferment with fruit juice for flavor, could that help kind of mitigate some of the sugar that they might see in a commercial one?

Hannah: Absolutely, and the sugar is the, it's the teaspoon of sugar that helps the medicine go down. What we really want are those organic acids, and so having a little sweetness at the end helps us to enjoy the flavor profiles so we don't feel like we're forcing vinegar into our bodies. That said, the flavors of health are sour and bitter. Um, because those are the flavors that help our bodies to digest.

Um, yeah, so making your ferments at home obviously gives you the most amount of control over the sugar remaining, and people will want some sort of test.

And how do I know? And I would say honestly, your body knows best. And your tongue is the very best indicator. 'cause while we can take these tests, they don't necessarily translate into flavor and what your body's actually receiving. And I think that also again goes to the notion that, you know, we have this idea every calorie is identical.

It's not. Where you're getting it from. What elements are contributing to the caloric value of that food is actually more important than how many calories it contains. Because if their calories coming from processed foods with very little nutritional value in allergenic products, that's going to have a way worse impact than something that's nutrient dense and may have a higher calorie count.

And so I would say making your own ferments at home is going to give you that freedom to ferment it as long as it needs for the flavor you enjoy, while also trusting that a lot of the sugar is gone. And here's the other

thing about it, is. Again, it's already been converted from a complex carbohydrate into something that's easier for your body to absorb and digest.

And so when we're saying sugar and kombucha, we're not just talking about sucrose. It really is in those simpler forms.

Katie: That makes sense. And I talk a lot about kind of what I call my micronutrient theory of health. And to your point about all calories not being equal, I think in our distillation of nutrition to simply calories as fuel, we miss this really big piece, which is that our friend JJ says, the body's not a bank account, it's a chemistry lab.

And we might be getting enough baseline calories but not getting enough nutrients. And I think this is why we see the phenomenon of people being, having plenty of calories, but being undernourished or even malnourished because we're not getting the baseline nutrients that we need. Things like protein and these essential starches and healthy fats and that if we don't, and micronutrients, if we don't get those, our body is so wise, it will continue to crave food even if it doesn't need calories because it needs those nutrients to survive.

And so I know fermented foods are such a rich source of so many of those micronutrients that are not present as much in our modern lifestyle. So I love that this is an easy way to introduce them. And we touched a little bit on this in our first episode, but I would love to talk about how fermentation and especially kombucha can be supportive for hormone balance, especially for women.

And I know big topics are things like, PMS and cycle changes and also perimenopause for a lot of the listeners.

Hannah: Well, I really want to build on what you said about micronutrients because I think it goes back to what are we feeding? We think we're feeding this big, giant human being, but in fact we're feeding microbes. And so I really think that what you're saying and what doses do we need things in, we've been programmed to think more is better, and that is so often not true, especially when they're in those chemicalized formats.

And so getting these nutrients in that living form. Again, as I said, not necessarily in massive doses, but in forms that our bodies can literally, instantly use an uptake. Because when we look at those chemical shapes, they're, they're different in a synthetic version versus a living version. I'm talking of course, about, you know, the carbon and the, all the molecules and how they're drawn.

Well, these are keys. If you're trying to put the wrong shape key into the lock, what's going to happen? It's not going to work. It's not going to do what it's supposed to. But when you have the right key in the right lock. Boom, everything works.

And so this, to your point about hormones is also really important because there are so many hormone disruptors in our current system and those include, you know, BPAs from receipts, they include microplastics, they include a whole litany of different things that we're exposed to.

Again, if it's only a little bit here or there might not be so bad, but the aggregate is what's really causing lots of weird changes in people from puberty happening too young to, um, inconsistent periods. And I think unfortunately for women, we haven't had a really good, healthy conversation around the value of healthy menses.

And I think that's shifting because I think so many people are like, oh, this is. Like there can be some negative emotions attached to it that really don't need to be there because from my perspective, you know, I'll be 50 coming up this year and I still have a regular menses. My goal is to maintain that as long as I can because fertility is such a key indicator of health and it doesn't mean. Because then I want to have children per se. It's more that by maintaining this healthy cycle, I know that my body is doing everything it needs. And that's not to say that menopause isn't healthy, of course it is because it's something that happens to everyone. And the more we can do to support that hormone health.

And so again, what are these fermented foods doing? What we've already talked about, they're helping to remove toxins from the body, literally with kombucha. The gluconic acid bonds to toxic molecules and like a bouncer escorts them out of your body through, um, through going pee hydrolysis. It's a powerful chelator.

And so where do we store toxins in the body? They end up sequestered into our fat cells. And again, this is why we need to be mindful when we go on some sort of detox protocol because sometimes we detox too quickly and the body can't handle it if we haven't cleared our pathways.

But when, you know, I've had women who went through menopause started drinking kombucha, their period came back. Now that may not have been the side effect they were intending, but I think what it demonstrates is it starts to clear out congestion in the body and starts to bring things back into balance. Now, I won't even pretend that I'm perfectly healthy because I live in this toxic world just like everyone else.

And so of course, fermented foods are there supporting me, but the thing I've had to realize is I need support in other ways. I can't just do it through diet. And I think that's just a reflection of where we are in our society.

Katie: Yeah, unfortunately it feels like that's true and even I've had Chris Kresser on this podcast who was for a very long time, a fan of get everything from food when possible, and even he has said now it's no longer possible with our modern food supply there. It. It has become, in order to be optimally healthy, we actually must supplement.

And there's a lot of, of course, personal factors that come into play there. And I'm with you on, of course, still try to get as much from natural sources and from food whenever possible. Make sure we get enough sunlight, make sure we get good sleep, all those things. And when our body's requesting it, also supplement when necessary.

And as you're talking about all these benefits of kombucha, I know you also have the fermentation kits available. And so if anybody's never made kombucha before, I just want to add an encouragement to attempt making it at home, because I know when I started, I found it was a lot simpler than I expected. I thought it was going to be a lot more complicated than it was, and it's literally pennies on the dollar compared to buying kombucha at the store, especially if you like me, have a lot of kids at your house, that that adds up very quickly and you're getting a more robust microbe more likely when you're making it at home.

And I would also love to talk about some of the more broad ways you speak about kombucha, because we've had these in-person conversations and I think they're so valuable. You talk about how kombucha reflects ancient wisdom and ancestral lineage in a modern wellness world. And I would love to bring this element in because I feel like this part is not often talked about.

Hannah: Absolutely. You know. you're consuming the byproduct of a culture that has learned how to coexist, I mean, these are completely different branches on the tree of life, bacteria and yeast, and of course bacteria and yeas, yeast live inside and on us, and we are, mean, part of why I call this bacterial sapiens is not only do we need them for every function in our body, we're kind of shaped like them, right?

Like the word bacteria comes from greek. Which means rod shaped. So Rod, if you're thinking rod shaped, well, we have this tubular body, we have these tubular appendages, like we are totally tubular, uh, we are a reflection of bacteria and even the way that they, for example, do gene transfer, right? So when a, when a bacterium dies, it's going to spill out it's DNA material. Other microbes can come and scoop that up. The way I see that reflected in our society today is memes. Right. There's a kernel, there's a DNA structure to a meme, and yet everyone puts their own twist on it, and we see how it evolves.

I would say human consciousness does the same thing. We build on the information, wisdom, and knowledge of the people who came before us, and we do this in a way that's very reflective of the microbes that are in our body. And I think this is again, why when we see gut dysbiosis and things like this, when we see moods completely change, or we see how, you know, personalities might even change because we so need the healthy microbes in that healthy balance for us to do it.

And again, remember, these are practices that people thousands of years engaged in. Imagine you are continuing on in a lineage that human beings have revered and considered sacred for so long. And when we allow ourselves, give ourselves permission to fully feel what that is and to understand and witness the cycles of life again, our calendar doesn't totally...Our New Year's in January, which is the dead of winter. We know actually it used to be right now, hence April Fool's Day was because, they changed the calendar. And if you didn't remember that or didn't get the news flash, that spring was no longer the beginning of the year, you were considered a fool.

And yet, isn't it foolish that we have tried to shape time in a way that is out of alignment with the cycles of nature? And I think that there's a huge movement and a huge consciousness. us back into alignment with these cycles because we're recognizing, oh, we need the sun in the morning in our eyes so that we have the hormones we need in order to sleep at night. And all of this sort of, you know, ancient wisdom is really being validated through scientific inquiry because unfortunately, we've gone the opposite direction and we've created so much harm with our modern technology and better living through chemistry.

Katie: I love that. And I've also heard you speak of the SCOBY as a metaphor for global community, and we've used the word scoby. I would love for you to define what SCOBY is for anybody who's never brewed kombucha and explain what you mean by it being a metaphor for global community.

Hannah: Scoby, it stands for Symbiotic Culture of bacteria and yeast. And I want to explain this, but first I want to lament slightly because unfortunately, there's been this myth that the SCOBY is the liquid and not the pellicle, and that the pellicle is garbage. And I cannot tell you how much that hurts my heart. And I don't say this as someone who sells pellicles, this as someone who recognizes that nature doesn't make mistakes. I mean, how long did we think the tonsils were irrelevant or. What do you need an appendix for? Only to find out later that it was incredibly vital that we retain our body parts and not just cut them out willy-nilly. And so SCOBY is this manifestation of microbes that have learned how to cohabitate together.

And I think that is a powerful metaphor for the world we're in now. I know there's a lot of division, there's a lot of inflammation, there's a lot of, you know, propaganda on many sides that is causing people to literally see family members, to see people in their community, as others, as people to fear or to demonize.

And that is the most horrific outcome we can ever see in a situation because the reality is we share so much more in common than what divides us. And I think unfortunately, we're being asked to focus on issues that are so far out of our scope of control, out of what we're able to even exert.

That we lose the recognition that just on a daily basis, having a smile exuding, a positive vibe, reaching out to people, seeing where they are as opposed to only reflecting this heightened state of. Again, inflammation is what I wanna call it. This heightened state of inflammation that we're being asked to carry is, is what's creating this division.

Because at the end of the day, we all really want the same things. We want to be loved, we want to be safe. We want to have delicious, nourishing foods. We want to have rich, deep, intimate connections with ourselves, with other people, and that is really challenging when you're dealing with a body that's inflamed, when you're dealing with a mind that's inflamed.

And so I think the metaphor of the SCOBY as a global community is one of hope and positivity. And it's when we start to consume again, the byproduct of something that already lives in harmony, we start to cultivate harmony within ourselves and then we can exude that to the rest of the world.

Katie: That's such a beautiful answer, and it makes me think of a quote from my friend Naval who said, A calm mind. A fit body. And a happy home. These cannot be bought and they must be built. So no matter how much money you have, you can't buy those things. They're all things we have to cultivate in our lives. And I know we've gotten to have such beautiful conversations in person around this.

I'm glad we got to bring it to the podcast as well. Is there anything else that I haven't asked you that people may not know about Fermentations that you feel like is really relevant and you want to share?

Hannah: There's just start. That's the real answer. It's going to like, here's the funny thing, right? Everyone, they're like, oh, I followed this steps to the recipe. Isn't it supposed to be perfect? I mean, anyone who's ever tried to learn how to bake a cake or a loaf of bread or, or execute any task, it takes practice.

And honestly, it's the practice that's worthwhile. It's not having the perfect end result. Sure. That's wonderful, but that doesn't feel as good if it didn't take the time and investment to get there. And so just taking that first step, investing in yourself, doing something that maybe feels scary or weird because what you're going to find out, oh, it's just a process.

And when I execute the process of the steps, I'm mostly successful. And there'll be times when I, when it isn't and that's okay. And it doesn't even necessarily mean you did anything wrong. Um, but I think reconnecting people to process. To not getting instant gratification to waiting, uh, to cultivating something, to having that patience is so valuable because in this TikTok world where you're constantly scrolling, myself included, that dopamine addiction can be really hard to break, and this is a way that we can easily, for not a lot of money and for very little time investment come back to process and cycle and nature, and it just feels so nourishing on a deep cellular level as well as on that spiritual level.

Katie: I love that, and I know we touched on this in our first episode, but for anyone who hasn't heard that episode, walk us through all of the ways to get into fermentation that you offer and where people can learn more about how to do it, where you would recommend them starting. I'll put all the links in the show notes as well.

Hannah: Absolutely we are kombucha kamp, kamp with a K 'cause we're cute and clever over here. um, we also have our book, the Big Book of Kombucha. Pretty straightforward. You can find it in any library and anywhere books are sold. Of course, we also have them at kombucha camp. It's 400 pages. People call it the Bible.

We're so grateful we put. A decade at least, of our research and information into that book. And, um, we're so grateful. People still find so much value in it. We sell kombucha, her raw honey cousin Jun, uh, water kefir and milk kefir. But of course, if you have any fermentation questions, we're always happy to help and direct you to other sources.

We're on all socials at Kombucha Camp and love to engage. We've had a lot of fun making some memes and things, so hope you'll come check us out and see how fun fermentation can be.

Katie: I love it. Well, as I said, all those links will be in the show notes at wellnessmama.com. If you guys are listening on the go, if you missed our first episode, I will link to that in the show notes as well. It was fascinating and we got to go in so many directions about fermentation and microbes. And Hannah, you are always such a wealth of knowledge and an absolute joy to talk to. Thank you so much for your time and for all that you've shared.

Hannah: Thank you Katie. Always great to see you.

Katie : And thank you as always for listening and sharing your most valuable resources, your time, your energy, and your attention with us today. We're both so grateful that you did and I hope that you will join me again on the next episode for the Wellness Mama Podcast.

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