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## How to Make Kombucha: 9/26/17 with CBTV Live

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### Chapter 1 - Chapter 1

#### Kombucha

(bright electronic music) - Hi, everybody. This is Liana from Creativebug, and I am here with Lila. - Hi, thanks for having me. - Lila is our special guest today, and I love Lila. She's actually my teacher. I spend a lot of time teaching on the site, so it's really exciting when I can be around a teacher, and Lila taught me how to make kombucha. - Yes. - And now she's going to teach all of you. But first, tell us a little bit about yourself, Lila. - Yeah, so my name is Lila Volkas, and I am a freelance food illustrator and writer here in the Bay area. And I also am a soon-to-be holistic nutritionist, and I've been teaching kombucha workshops for the last five years. - That's right, and Lila likes to consider herself a health educator in a lot of ways with a very DIY food bent, and I know I was so fortunate when I took Lila's kombucha class, because I have been drinking kombucha for years and years and years, and a lot of people have seen it in the markets and also fall in love with it. For those who don't know, how would you describe kombucha? - So, I would consider kombucha fermented tea. - So it's like kind of, it's like a little bit sweet and... - It's a little sweet and a little kind of vinegary. You kind of taste like a version of apple cider. - Mmmhmm. And a lot of times, it comes with like, fruit essences mixed into it, which makes it really nice, like ginger and different berries and things like that. So I love it. I have been spending so much money buying kombucha in the store, and so when I saw that Lila was teaching this kombucha class, I thought, I have to learn how to make my own, if only just so I can save my money. - Totally. It's so much cheaper to make yourself. It's like, I don't know, five or six dollars a bottle to buy at the store, but it costs like five cents a gallon to make yourself. - That is music to my ears. - So there we go. - So tell me a little bit. What is kombucha? Let's just start with the basics for those who don't know, and what it means to ferment tea. - [Lila] Yes, so, kombucha is fermented tea, and what that means is that we have a SCOBY. So this is the kind of essential ingredient to the kombucha making process, and it is... SCOBY stands for symbiotic colony of bacteria and yeast. - Some people know it as, they call it the mother. - The mother or a mushroom, even though it's not an actual mushroom. But it's just kind of a mat of cells that feed on the sugar in tea. So, what you need to do, or what essentially kombucha is it's sweetened tea that you plop this kind of weird slimy thing in and let it sit on the counter for a week, and it ferments it and makes it bubbly and carbonated and super delicious. - It's kinda crazy that in just one week, you can make your own carbonated beverage. - Yeah. And I feel like carbonation is my favorite part about it, because it's really magical. I knew, what else in nature is carbonated? - I know, and you did this your without a SodaStream. - Exactly. - So do you wanna get your hands dirty and go in and actually show them what the SCOBY looks like? - [Lila] All right, so SCOBYs, they kind of feel like a jellyfish. But you can see that it's kind of... It's kind of a light color, but then underneath, here we have a darker color. So the top is known as the mother, and then the bottom are known as the babies. And so you can see here that if you peel them away, they kind of come apart pretty easily. - [Liana] So is that like thin one that you took apart, is that enough to make kombucha, like if you were to put that in a jar? - [Lila] That, if you put this in a jar, it would take a while for it to ferment, but, yeah, this is enough to make kombucha. - [Liana] Okay, okay. So, as you were telling me earlier, the thing about SCOBYs is that, like, they want to be shared. - [Lila] Yes. - [Liana] So as you make kombucha, they will grow these stacks and stacks. I mean, they could really like fill the whole jar, actually. - Oh, yeah. If you let it go, it will just, you know, at a certain point, it needs more food and

air, but it will continue to grow. Like, I've had my SCOBY actively brewing for the last five years. But when I got my SCOBY from someone else who got it from San Francisco in 1992, and so, it's kind of come full circle. So we're back into the homeland of where this SCOBY, 'cause this is a version, this is a relative of my SCOBY, of what I grew at home. - [Liana] I have a cousin of your SCOBY. Yeah, so write to Creativebug, and maybe I'll send you one of my SCOBYs if you want. Other than writing to me, how would one go about getting a SCOBY of their own? - Yeah, so you can get a SCOBY at lots of different sites online. There's also lots of stores around the Bay area and other major cities that you can purchase them. - All right, and for those who are just tuning in, we're making kombucha today. If you have questions for us as we go along, please feel free to write in, and we might actually have a question right now. - [Ally] We do. Kristi wants to know, she says, I have heard the mother can make you sick if you ferment it too far. Is this true? - Okay. Kristi says, I have heard that the mother can make you sick if you ferment it to far. Is this true? I turn to the expert. - Yes. So, what I like to tell people in my workshops is that, you know, you wanna prepare kombucha with care and safety like you would anything else that you put in your body. So you could sick from making a sandwich. You could get sick from brewing kombucha. However, I would say that if you ferment it for too long, it will taste like vinegar. I don't know if the too long part has the most to do with if it would make you sick or not, but I would say that your body has the most wisdom. So if you try your kombucha and you're like, mm, I don't feel so good, like, maybe that kombucha, that batch isn't for you. - And I think that brewing it for about one week is the right benchmark, and 10 days maybe is towards the end, or would you say about two weeks? - No, I would say, you know, some people who really want to... The longer you ferment, the less sugar content. So some people who really like the sour taste will ferment it for two weeks and upward, but it really depends on your taste. There's no maximum. It will just taste like vinegar by the end. - And if you wanna keep to the safe side and that freaks you out, then just do it seven to 10 days, and you'll be fine. And then a little bit of tips about how to tell if your SCOBY is bad, because I actually had a neighbor I gave a SCOBY to the other day, and she was sending me pictures going, it looks weird. Are you sure it isn't rotten? - Yeah, so I get... My inbox, my email inbox, is full of SCOBY pictures of people emailing me. - Lucky you. - Yeah, I get so many beautiful pictures. So, some ways to tell that your SCOBY is not doing so hot is that there's furry, you know, gray, blue mold growing on top. You might see some of these kind of, you can see that these are brown kind of little string things. Most people... So I get a lot of pictures of these, because people think that this is mold, but it's actually just yeast strands, which is super natural. It's part of the organism's biology. - So we're looking for actual fur. - We're looking for, you know, you know what yogurt looks like on your forgotten yogurt. - Yeah, exactly. You don't want that. - You don't want that. - Start over. - If it's that, then you say, oh well, I'll get a new SCOBY. - Okay, so let's talk about how we go ahead and make the kombucha. Here, we have a nice little SCOBY, and it's sitting in about probably a quarter cup or a half a cup of, what do you call that? It's like a starter fluid? - [Lila] Yeah, so the starter liquid is essentially just brewed, previously-brewed kombucha. - Yep. So I'm going to go ahead and dump it into this jar. Try not to spill. Whoa. And so once it's in there, and this is a... How big is this jar? - [Lila] This is a quart. - [Liana] This is a quart jar. - [Lila] So, four cups. - [Liana] Okay. And then in here, we have a container where we brewed tea earlier. So this is two tea bags, and I'm just using a black tea. And we put four cups of hot water in here with a quarter cup of sugar, and that is the magic ratio for the right amount of sugar for your tea. - [Lila] Yeah. - And what kind of teas are good for making kombucha? - Yeah, so, kombucha, the SCOBY, you can think of it as kind of like your new pet. So, your pet loves the tannins in black teas. And so any member of the tea family. So, black tea, green tea, white tea. You know, the black

has the most tannins, but the rest are gonna be great food for your SCOBY. - And it's fun with things like rose tea or hibiscus, so you can really experiment. - Yeah, so you can use... Those are gonna be more herbal teas, which we consider teas, but you wanna make sure that you don't have any, like a lot of volatile oils in them, like peppermint might interfere with the fermentation process. - Or I think you said earl gray. - [Lila] Earl gray also has bergamot oil in it, so you wanna make sure that if you do anything with oils, you do it after in the bottling process, which we'll get to. - [Liana] Okay. Well, do you wanna do the honors and put our tea into here? - [Lila] Yes, I would love to. - [Liana] So we have brewed the tea. It's been sitting in here for a couple of hours. It is cooled down. You don't wanna put hot water into your SCOBY. SCOBYs don't like hot water. - [Lila] No, it's like you love your cat, and you don't wanna put your cat in boiling hot water. It wouldn't like that very much. (Liana laughs) So we wait until the tea is completely cool, and then we put it in the brewing vessel. - [Liana] All right, and then once it's in the brewing vessel, you just take a little piece of fabric and stick it on top, and put it in place with rubber band. - And you do this because, you know, your kombucha SCOBY, it's alive. It needs oxygen. So I might, in my workshops, I'll give it, I'll give the SCOBY in a sealed jar, but that's only for transportation, and you really want one of these. It really doesn't matter what kind of material it is. You just want something that's tightly woven so you don't get fruit flies in there. - [Liana] That's right. And if you do put a lid on it, like actually put a Ball jar lid on it, be warned, it probably will explode on you. Because this is... You're fermenting something. There's a lot of... - [Lila] Pressure. - [Liana] Yeah, a lot of pressure that's gonna build up in there. So you have been warned. - Yes. - Okay. So, once you have done this, you're gonna set it aside in a cool, dark place. - Yes. So you wanna put, so, that was the preparation, and now the next step is to have some patience, because we are going to put this in a cool, dark place for at least a week, and let it ferment. So what's happening is that the SCOBY is going to eating the sugar from the tea, and in return, naturally carbonating the drink and infusing it with vitamins and minerals. - [Liana] Okay, so about one week in, you're gonna taste it. - Yes. And so it's kind of like, I call it the Goldilocks taste test. So, after one week, you can pull it out and unveil the SCOBY. See how it's doing. - [Liana] You don't have to drink right off the top. - [Lila] No. (Liana laughs) - You don't want that SCOBY rubbing right up against your mouth. - No, and you probably won't want any of your yummy mouth bacteria in the SCOBY. So, you're gonna pour a little bit in another cup and take a sip. And everybody is different. My kombucha tastes might be different than yours. So you'll taste it and see if it tastes just carbonated enough, just sweet enough, and if you like it, then you move onto the bottling process. If it's too sour, then you say, oh well, next time I'll add more sugar or ferment it for less time. And if it's too sweet, then you'll wanna ferment it for a couple more days. - [Liana] There you go. So should we... Do we have another question? - [Ally] We have another question. Courtney is asking, if you touch the SCOBY, does it hurt it? Would it contaminate it? - Courtney wants to know, if you touch the SCOBY, will you hurt it? - So, I describe SCOBYs as, you know, delicate creatures, but they're also pretty hardy. so the only thing about touching the SCOBY, it's not gonna hurt it. You don't wanna handle it a lot, but I always use my hands when I'm transferring the SCOBY. I'll make sure that my hands, I previously washed my hands, just so you know. And you wanna make sure your hands are clean, and any of the surrounding area is clean. - So don't ride the subway and go ride home and touch your SCOBY. - No, no, no. - Okay. (both laugh) How gross is all of this? It's science. It's science, everybody. Okay, are there any more questions, or should we move on? - [Ally] Not yet. - Okay. So the next step is my favorite part, which is the bottling process. So, I'm just going to move in our bottles here. We are using these like pressurized bottles, so these are great. So now, we can actually, we wanna trap that fermentation and the sparkling aspect of it. So

when you transfer it over, you don't necessarily want to just put it into another mason jar where it's going to lose all those bubbles. - Totally. - Because it's also gonna go in the fridge. - Yes. - Yeah. - Yes. And then, this is also for safety reasons, because as we were just talking about, if you put the lid on a kombucha that's in with like just a regular twist lid, and let's say you forget about it outside the refrigerator, it could explode. So luckily, if this has too much pressure, what's going to happen? The top's just going to come off, and that's fine. - [Liana] So use a pressurized lid, people. PSA. Okay, so we've got our jar here. We've got this guy. Shall we go ahead and put it in, or do you do your mix-ins first? - [Lila] Let's put in some mix-ins first. So, we're going to flavor our kombucha in three different ways, and the first way is just with some fruit juice. So, what we did is I just squeezed a lemon in here, and I'm going to pour some lemon juice in here. You could use cranberry juice, blueberry juice, whatever kind of juice you like. - [Liana] So that's just one whole lemon. - [Lila] That is one whole lemon, and then we're going to go a little bit fancy with some rose extract. I love rose flavor, so this is a little bit of rose water. - [Liana] I'm so excited to try this. - [Ally] I have a question. - [Lila] Yes. Instead of using a whole lemon, instead of getting the juice from a lemon could you buy one of those little lemon bottles or lime bottles or what have you and use the juice from that, the concentrate? - Okay, Ally wants to know if we can use concentrate lemon or lemon that is already squeezed in a jar. - Yes. You could use both. I prefer using like, whole, like from a fruit, and I cut it, and I see where it's coming from, 'cause that's just like, what I like in my life, but totally for convenience, you can use any type of bottled juice you want. - And I think it's nice... I really like the addition of a citrus or an acid. For some reason, it just kind of rounds out that vinegar sweet, sour... - Totally. - I've used mandarins. I've used... - Oh, that sounds good. - Oh, yeah. Like, whatever's in season, honestly. Whatever looks good in the store, pop it in there. Grapefruit's amazing. - Mhmm, yeah. Yeah. So we have the lemon in the bottle. Then we're going to add some of our rose water. So I'm just going to add like, you know, two capfuls of this, and so this, this is another way you can flavor your kombucha, which is with some sort of extract. - [Liana] Oh, it smells so good. - [Lila] Yeah. I feel relaxed already. - Spa water kombucha. - Yes, oh, that's the perfect name for it. So, that's basically the flavoring for this bottle. And then what we're going to do is we're going to take our already-brewed kombucha that we tasted and it's just right, and we're going to pour it in the funnel, and we're only going to fill this up halfway, because we're working with... We're going to show you how to flavor another kombucha, so we don't want to use all of it on one. And then, you just put the snap top back on, and voila, you have some lemon rose kombucha. - [Liana] And with this one, you could probably drink it right away. - [Lila] Yeah, yeah. So you could drink it right away. You could also put it for a second fermentation. So there's, you know, two different options. Either you have your kombucha, it's flavored, drink it right now, or the second fermentation is where you leave this bottle. In an ideal world, this would be completely full, and then you would leave it outside of the refrigerator for a couple days. Now, why would you do that? Because it will continue to ferment the kombucha, but at a much slower pace than you would if you had a whole SCOBY in there. - Okay. - So that will continue to build the carbonation, which is my favorite part. - Oh. - And then kind of like integrate the flavors so it kind of, I don't know. - See, I've been putting it right in the fridge, but now I know. Okay, I've gotta try it your way. - Well, you can do either way. So there's the simple version, and there's the little bit more complicated version. - All right, I'm learning something new. The pro edition. - [Ally] And we have another question. - We have another question? - All right. - [Ally] Kate wants to know, she's saying, if I wanna add ginger, would I use a whole ginger? - Okay, Kate wants to know, if I wanna add ginger, would I add whole ginger? - That's a great question. - I asked you this question when I was in your class. - Yeah, I get this question every time I every teach

kombucha. So I love ginger-flavored kombucha, and I... There's a couple different ways that you can use the ginger. Because if you put just a whole ginger in there, you're not quite going to get that gingeriness, that bite that you really like from the ginger. So what I'll do is either I'll make a simple syrup by cooking the ginger in sugar or I will do, I call it kind of like a freestyle juice which is I put it, I put like a... - You're so wild. - I know, right? I put an inch of ginger and a little bit of water in my blender and just turn it on to make ginger juice, which will be much a better flavor than just whole rounds of ginger. - Okay, and that's a good option if you don't wanna add more sugar. So with simple syrup, it's one part sugar to one part water, and you're gonna pop in some of those ginger slices. So that would be like a cup, you know, half a cup of sugar, half a cup of water, which is delicious, but if you're already feeling like you're happy with the sweetness level and you don't wanna add more, then do the wild juice. - Yes. - In a blender. - Freestyle, it was a freestyle juice. - The freestyle juice. (both laugh) I sound like a mom right now. - I love it, I love it. - Your wild juice. - Yeah. - So I hope we answered your questions. Should we go on and show how to make the other ones? - [Lila] Okay, so we've got our lemon rose. The next one we're going to make is using a store-bought simple syrup, simple-ish syrup, which is this... It's pomegranate concentrate. So it's kind of like syrupy. You would use pomegranate juice, but this, what happens when you add more sugar into the second fermentation is that it gives it, the SCOBY, or the yeast particles, a little bit more food in there to continue to ferment. So, we're going to take our funnel, and we're going to pour the rest of the kombucha. - [Liana] I love how fizzy it is. - [Lila] I know, you did a really great job. - [Liana] Thank you. - [Lila] You did A+. - [Liana] This is my batch. - [Lila] A+ on your kombucha-making. (Liana laughs) - [Liana] Thank you. - [Lila] All right, so, we're going to get that all in there, and then, with the simple syrups, or some sort of syrup, you really don't need that much. So we're just gonna, you know, eyeball about like two teaspoons. - [Liana] Do you wanna pour it in here, or do you wanna go right in there? - [Lila] Let's pour it in here. So, so you can see it's kind of thick. So that's maybe a little bit more than two teaspoons, and why don't you do the honors? - [Liana] Oh my God, I'm so scared. So, does that look about right, or should I stop? - [Lila] That looks perfect, that looks perfect. So then... - [Liana] Oh, it's so pretty. - [Lila] I know, then I would, I gently kind of like shake it up a little bit, and then this one, again, you can drink it. This is great if your kombucha tastes too vinegary to drink immediately, 'cause you have the sweetness from the pomegranate concentrate, or I would usually leave this one for a second fermentation, because there's more food for the yeast and the kind of kombucha that's in there, so it will continue to ferment, continue to eat that sugar. - Awesome. - Yeah. - And then do you wanna show us the third and final ones? Okay. - Yes, I would love to. - Great. - All right. - I'm going to move this out of the way. We're making a fine mess here. - So, this is our final flavoring way, and I think this is a perfect flavor for transitioning into the season that we're in now, which is fall. So this is an apple cider kombucha, which is a huge potluck hit. Whenever I bring this to a potluck, not only is it a conversation-starter, but it's delicious. - Awesome. And here, we have a big, wide jar. - [Lila] Yes, we have a big, wide jar, because this one is not going to be left outside of the refrigerator, because we're going to be putting whole fruits in here. And this is gonna be kind of setting up the situation to have more of a chance of mold if we leave this outside of the refrigerator. - [Liana] Okay, so pop this one in the refrigerator right away if you're working with whole fruit. - [Lila] Yes. So we're going to stick these apple pieces in here, and I like to use, you know, a whole apple. And, you know, you can cut it in pretty ways. We made it look kind of nice. And so we put these apple pieces in here, and then, you know, we got some cinnamon sticks, and I'll usually do... It's so funny that this has like, a hole thing, as if you are gonna do this. - [Liana] I know, why do they do that? (Liana laughs) -



[Lila] Okay, so unscrew the top, and then we're going to get some cinnamon sticks in here. So I like to put two, and then you can put some whole cloves in there. - [Liana] Again, we have the shaker for whole cloves. - [Lila] The shaker? Not gonna come out of those holes. (both laugh) - [Liana] All right, so you think like, a tablespoon maybe? - [Lila] I'd say, yeah, a tablespoon. 'Cause what I do with this after we put all the ingredients in there is we put it in the refrigerator for overnight. That's about it, so that the flavors can kind of meld together. And so it doesn't... It's not going to be, because we don't want to lose too much of the carbonation, 'cause the moment you put it in a wider jar, there's more air circulation. So you wanna make sure that, you know, this is an overnight thing for the next day's holiday party. - [Liana] Oh, good to know, good to know. Excellent. And, I don't know if you guys have noticed all along, but we have these amazing illustrations here that Lila did, and I love them so much. They're actually the mother and the baby SCOBY, right, and her I love kombucha sticker. If you check out Lila on Instagram or on Facebook and you write to her, maybe she could even send you a sticker. You can buy it from her. So tell us, what is your Instagram handle? How can people find you? - Yes, my Instagram handle is LilaVolkas. So it's my first and last name, and I post different fun recipe and illustrations and food ideas on there daily. - You should check her out. - Yeah. - She's a delight. All right, did we have any more questions, or are we good? All right, well, thanks for joining us, everybody. We do this every Tuesday and Thursday at four p.m., so join us on Thursday. We're going to be making some paper clay bowls with gold leafing. - That sounds super fun. - Courtney will be here. - Awesome. - Okay, thank you again, Lila. Great having you. - Yeah, thanks so much for having me. - Bye. - Bye. - [Ally] Bye. (bright electronic music)