



Why We Should Be Advocating for the Bees | Carly Stein

[00:00:00] Guest Intro - Carly Stein

Darin: Hey, everybody, welcome to the show. This is Darin Olien. This is The Darin Olien Show. I am so excited to bring you this episode. This is all about bees. That's right, bees. My next guest is Carly Stein. I was looking at products to support because I love to support products that are actually doing good. I have turned down so many products, you have no idea. I love supporting bees in so many different ways. We talked about it in Down to Earth several times. I even got stung by one. I've explored putting bees on my property in terms of like harvesting honey, and there's always been this debate of vegans eating honey and everything else. But if you do things right and not just buy any old honey, that's actually very detrimental to bees and also contaminated with pesticides. You're gonna learn a lot about that right now in this episode with Carly. For me, understanding more about the harvesting and supporting of the bees, you can actually do it and it's benefitting the bees. People, there's a lot more than just honey, and you're gonna learn a lot in this episode. There's royal jelly, there's propolis, there's bee pollen. When you do all of that correctly and the harvesting, you actually help the bees thrive. Yes, I'm plant-based, I'm a vegan, and I love and consume these products. Carly has an incredible story of how she got to this point and started Beekeeper's Naturals where she healed herself and questioned the traditional ways of trying to deal with the autoimmune condition, with allergies, and all of that stuff, and she said no. I'm gonna find a different way and she didn't change her life. In that process, she says, listen, people need to be exposed and have the option of royal jelly, propolis, and bee pollen. Really, her whole mission because it's a lot bigger than having a Beekeeper's Naturals and getting incredible nutraceuticals out to the mainstream. It's about literally doing things that are preventing illness rather than reacting, which is obviously the conventional weird-ass model. She became a tireless beekeeper, and she learned from some of the best and how to be an advocate for the preservation of bees globally. She's doing a lot of advancements in that place, and we really want to use this platform of understanding ancient alchemy between us and bees, and why the propolis is used for, what the royal jelly is used for, and how that alchemy supports our health. You are going to love this. Carly is an incredible human. In 2019, she was Forbes 30 under 30 list for her entrepreneurial game-changing kind of way she went about business. Again, she put the bees first. So that's what I want you to understand, when you learn and you will learn from this episode, bees first and the whole way. Then we get the benefit of the bees first because we get great tested products. She supports the growers, she supports the cleanliness and the testing protocols, and she supports the bees. Again, this is all about the bees, everyone. So kick back, relax and enjoy this incredible conversation with my new friend, Carly Stein.

[00:03:55] Podcast Intro

Darin: You are listening to The Darin Olien Show. I am Darin, and it is my life's mission to find and share healthy and sustainable ways of living. In this podcast, I talk to inspiring people and professionals from around the world to uncover ways that we as humans can improve our lifestyles, strengthen our mindsets, and take better care of this beautiful planet



we call home. If you're looking for motivation to take the next steps towards a happier, healthier life, then you're in the right place, and I'm stoked that you're here. So let's do this. This is my show, The Darin Olien Show.

[00:04:39] First Part of the Interview

Darin: I come from the health care world for sure and not health care in terms of hospitals, but like journeying around the world and hunting superfoods and all that stuff. Clearly, the pollinators are extremely important. I think if anyone unless they're living under a rock, they realize that the pollination is incredibly important but at the end of the day, we're mono-cropping and doing weird shit in the world. Then we're transplanting in the almond industry and all this weird shit. Being fully plant-based for 17 years, I think my thing is, I've always loved the health benefits of raw honey. Then we're gonna get into just all these other great royal jelly and propolis and all of this stuff. The biggest thing is are we harming the bees? So what are we doing? Oh, my God, we can't harvest and we're harming them and all of this stuff. I want to get into that, like, how is all of this produced by the bee, as well as the environmental necessity to support healthy bees moving forward.

Carly: That's where the confusion is.

[00:05:45] Are honey and bee products harming the bees?

Carly: I've had amazing conversations with vegans who now call themselves beegan. I've met people who have a pretty strong response to bee products because they're like this is an animal byproduct, that's not in my values, and I totally understand that, but there's also a little bit of education needed sometimes because if you're supporting the sustainable beekeeping industry, that's actually what we want. That's actually an industry that's championing bees. We work very hard, and we don't own our apiaries. We partner with beekeepers internationally. We are working with beekeepers in Brazil, we're working a lot in Canada, we're working in Spain. I think the pollen I brought you today actually is from our apiary in Spain, but we're partnering with people internationally who have sustainable practices. It's been really amazing for me because I've been able to see these small-scale beekeepers grow their business alongside my business. We're really working together to create this industry of sustainable beekeepers when the pervasive beekeeping industry is very much about migratory beekeeping, and pollination services, and all of these other things that are actually quite damaging in our in-service of growing food crops. So I eat primarily plant-based, but I'm very conscious of where my food is coming from, and I'm not under the illusion that I'm helping the planet by drinking almond milk but not eating a burger or something like that, just understanding the interplay. It's really dynamic, and I think it's really confusing for people.

Darin: Hundred percent. Well, we all want to reduce things down to a light switch idea, just click and everyone should be vegan and the world's gonna go back and nature's gonna thrive and whatever these broad strokes simplistic ideas. I think over time of exposure of information and being around, going around the world, you realize that there's not a light switch approach to any of this stuff because obviously, the almond industry is horrifying. It's horrifying from an environmental standpoint, just from water consumption alone. Then the horrifying transplant of bees to pollinate such a huge crop which is unsustainably impossible



for bees to do that on a regular basis unless they're traveling them across and killing so many in the transport and the stress, it's kind of ridiculous. But you bring that up because we cannot live in that delusion because that doesn't change anything. So why don't you unpack what is sustainable beekeeping and how does that actually support the life of the bee?

[00:08:22] What is sustainable beekeeping?

Carly: Definitely, that's a great question. First of all, there's not an objective definition. I professionally talk to beekeepers all over the world and there's not an objective definition, so I've kind of had to create a definition for my company. For Beekeeper's Naturals looking at the plight of the bee is the number one concern, in my opinion, the number one damaging factor is pesticides. Going back to the history there in 2006, DDT was taken out of the game, which was really important. It was hugely detrimental to pollinators. We saw tons of images of birds, all kinds of things, so that was taken out in 2006, and it was replaced by a substance called neonicotinoids. Today, neonicotinoids, neonics, that's like the widely used pesticide in the US. That is pretty pervasive, and it's really interesting because in other parts of the world, it's not used, it's actually actively banned. There are parts of Europe where it's banned. In Canada, they instituted a partial ban starting in Ontario. So with my company, it can be really hard for us to find geographies to operate in because we're basically constantly searching for clean grounds where there's a pesticide-free environment, so that's kind of the history. Neonicotinoids, they're problematic for quite a few reasons. For the bees, it's a neuroactive substance and it's been shown to affect the bee's spatial reasoning, so the bees literally can't find their way home. They operate and forage for food and spatial reasoning is critical to their being. Then beyond that, we don't even really know the long-term impact of neonics. We know it's water-soluble, so it's getting into our soil. It's totally degrading our soil, and we don't know how that's gonna look a few years out. Sometimes it's sprayed on plants. Other times because it's water-soluble, the seed is dipped, and it grows through the vascular system of the plants. That's kind of scary, but we don't know the long-term effects. We do know that it has a negative neurological effect on the bees, and the bees are teeny tiny so chances are, it has some kind of effect on us in that way.

Darin: I would like to actually dig into that because I've been working on a book right now on fatal conveniences, and looking at, from food agriculture to EMFs to everything else, which is also probably a bee situation too with the EMFs and electricity and the dirty electricity. But to your point, we have no idea when you divorce yourself from nature, which this is doing, using chemicals rather than understanding ecology and biology of plants and animals and insects. It's a really bad experiment that we're right in the middle of.

Carly: Yeah, and the crazy, crazy part is that humans are so reliant on bees 1/3 of our food supply. If we lose the bees, 1/3 of our food supply-- There's another pollinator right there.

Darin: So we got some hummingbird action behind us. We're sitting under an oak tree hoping some bees would come by today, but maybe they would. The little bee whisperer we have here.

Carly: I usually attract. So the importance of bees is 1/3 of our food supply. Think about just the inflation of an apple. If we're losing supply, it's going to become very expensive for people to eat healthy food, to eat natural food, and at some points, we could lose that



privilege. Then going beyond the food that we eat, over 40% of wildflowers are bee-pollinated. All the other species that rely on bee pollination and honey bees are the number one pollinators and that's why we're seeing migratory beekeeping. Migratory beekeeping, it's the practice of literally bringing bees, migrating bees over to different crops to pollinate because there are not enough natural pollinators in the area because year over year, we've been losing bees. I've had a lot of debates with different beekeepers around the world on this. Migratory beekeeping isn't necessarily horrible. We have a long history of it. There's a history of people sending bees down the Nile. So certainly, anything can-- There's a bee.

Darin: There's a bee. I bet you guys can hear this right now. The bee is gonna land on the mic. There's now there's two. We just said this. You know when they're flying around and you can feel the wind of their wings, I just could--

Carly: And hearing the hum, the buzz, it's really therapeutic.

Darin: So I'm wondering if anyone can hear that. It's so beautiful.

Carly: Yes, I meditate in apiaries all the time because that sound, it's really powerful. So anything can be done with a lot of TLC. Migratory beekeeping, I'm sure there are some incredibly thoughtful beekeepers practicing this in a really beautiful way, but that's not the norm.

Darin: In terms of scale, in terms of the pressure of the almond industry--

Carly: It's certainly not the norm.

Darin: You can't do it carefully and healthfully at that type of scale.

Carly: The reality is, we're losing pollinators. We need pollinators to grow nearly everything from almonds to blueberries to avocados, and consumption for things like almonds has gone through the roof. So we're losing the things that grow them, but people want to eat more of them. So what's happening with migratory beekeeping is there trucking bees in from all over. Let's say you live in Florida, during February, during the almond bloom period, you would put your bees on a truck, bring them over to California and then let them loose where a bunch of other beekeepers from all over the country will also be letting them loose. It's difficult because diseases can be spread with the bees, just the process of wrapping up your hive, sticking it on a dark truck, it can be very jarring that whole experience of transportation for them. Then letting them loose to pollinate these crops, and this is what really gets me. Oftentimes these crops are covered in pesticides. Sometimes you even see pesticides being sprayed while the bees are let loose to pollinate. That's the thing that kills me. We have such a focus on pesticides and how it affects the bees, so that's the thing that's really painful for me and something that's challenging for our company just at an operational level. There are so many beautiful biodynamic organic growers in America. I really focus on that for my own food, but when it comes to bees, the bees will forage for a five-mile radius. Just because you're "organic honey or on organic land," which gives you the organic certification, it doesn't mean that end product is free of pesticides and it doesn't mean your bees are safe, you can't put a leash on them or fence them in like cattle.

[00:15:20] Keeping pesticides away from the bees

Carly: For my company to work with any beekeeper, we have to make sure that that end product is pesticide-free. How we do that is we practice third-party pesticide testing and we test for every pesticide toxin and pollutant in accordance with Health Canada. I'm from Canada, but Health Canada's a little more rigorous than the US in terms of pesticide classification. In doing that, we're really limited with where we can work, especially with Covid and shipping and moving things. I live in the US, I'd love to be able to work more in the US but it's really hard to find an apiary that's in the middle of nowhere enough that it doesn't, on the peripheral or something, have pesticides around it. I have friends who have done studies with their bees where they've planted just so much good high-quality organic heirloom foliage, plants, that sort of thing, and the pesticide doesn't show up as much for sure. So if you surround the bees with the good stuff, they're not going to necessarily fly next door, but they can. For my company, especially because our customer base, a lot of them, myself included are auto-immune, it's people who do have sensitive systems, and we have a commitment to pesticide-free. So it's really limiting and beyond the corporate challenges. I really want to live in a place where bees are recognized as the pillars of our ecosystem and there's more action being taken to protect them because we will get into a situation where it's too late.

Darin: It's a big one. So not only is it affecting them, but then they're bringing it back and it's in concentrations affecting us.

Carly: Maybe it'd be helpful if I gave a little 101.

Darin: Exactly. That was my next question.

Carly: Awesome. I can talk about it. The good stuff.

[00:17:05] How bees make honey

Carly: I'll start with honey because everyone knows and loves honey. Honey is the bee's food. You can think of it as their carbohydrates. It's their energy source. How the bees get honey is they get it from floral nectars. They have this long tube-like tongue, they stick it into the flower, suck up the nectar, and they store it in their honey stomach. They have two stomachs, their normal stomach and their honey stomach, which you can think of as a nectar backpack. They bring that back to the hive, throw it up. Throwing up, you've to think about it. It's a very different creature. They're not humans, the bees throwing up is so different than us. Even that term I sometimes veer away from.

Darin: It's unpacking.

Carly: Yeah, it's unpacking. Their honey stomach is literally a nectar backpack. It is their biological mechanism to transport floral nectar back to the hive where they then put it into the comb. They use their wings to fan out the moisture, and they allow it to ferment.

Darin: No way.



Carly: Honey is literally fermented nectar mixed with very powerful bee enzymes. A really interesting fact about honey, it is the only food on the planet that never expires, and that's a testament to the enzymes of the bees. They found honey in Egyptian tombs that's still totally edible. I think about the power of those enzymes. For bees, it's their food, their carbs. For humans, it's full of antioxidants. It's highly enzymatic, there are antiviral properties. Think about it again, honey is floral nectar combined with bee enzymes.

Darin: That lasts forever. And there are tribes that live on, where is it, in Africa? I forgot the tribe. 90% of their calories are from honey. Not a fat person in the joint either.

Carly: Well, it's interesting too, because honey doesn't cause the same sort of glycemic index spike as a cane sugar would. Honey is still sugar for sure. I don't encourage people to eat an entire jar in a sitting, but there are so many nutritional benefits.

Darin: I would.

Carly: I've gone pretty hard with a jar before. But there are so many nutritional benefits and it doesn't spike your insulin in the same way. Again, it's full of antioxidants. A nice kind of life hack with honey that I've been using recently. When you have a spoon of honey, it allows for a slow steady spike in insulin versus a crazy jolt. It allows the tryptophan to cross the blood-brain barrier where it's converted into serotonin and then melatonin in the dark. That's why your grandmother may have spoken about this, but having like tea with honey or milk and honey before bed that was like a traditional thing. There is merit to it because having honey before bed will really help to calm your body down and then another nice thing--

Darin: Totally doing that tonight.

Carly: Oh yes, the best. Then the other nice thing is sometimes this happens often with women as their aging, they'll wake up in the middle of the night because glycogen stores and their liver are depleted, so their brain is triggering like a crisis search for fuel. So honey because it's slow-release, it actually helps like engine stores stay steady overnight so you don't have those waves and crashes and so it helps people sleep through the night. It's really great, just a teaspoon before bed. I do that every night and I find it really helps.

Darin: Sticking on honey, super processed, pasteurized, raw, let's break that down because there's some really bad honey.

[00:20:28] Not all honey is created equal

Carly: Not all honey is created equal at all. The famous honey, the honey that you might see at a grocery store, the sort of squeezey bottle in the bear, that's pasteurized. What that means is it's heated and boiled. At that point, you're cooking all the nutrients out. You're killing those beautiful, unbelievable enzymes and you're left with a sugar water and the "nice thing" about that is that it doesn't crystallize, so it doesn't solidify. I've had people come to me and be like, "My honey is hard. What happened? Did it go bad?" I'm like, "No, no, that's the natural process of crystallization, that actually means that your honey is not pasteurized. It's totally fine. That honey will outlive you, so do not throw it out." If that texture or hardness bothers you, what people can do is take a pot of boiling water, stick the whole jar in and just let it sit for a minute, you're not going to pasteurize the honey. The process of pasteurization is



literally cooking it and boiling it, so that will just kind of soften it. But raw, unpasteurized, that's really what you're looking for. You really don't want to pasteurize stuff because you're losing all of those beautiful benefits.

Darin: It's just so weird because you have this thing that is protected itself and can survive all of us eons over and over, what would be the point of pasteurizing?

Carly: Convenience, unfortunately.

Darin: Convenience of what?

Carly: We're using something out of a bottle because if it's too hard to spread on our toasts, we don't like it.

Darin: It all comes down to the fatal convenience of killing the food so that it comes out of a bottle easily.

Carly: Yeah, so there's a few things today. I think that was the original idea for pasteurization convenience. By the way, organic does not mean it's not pasteurized, so watch out for that. A lot of the honey on the market today, it's honey mixed with corn syrup. It's not even pure honey.

Darin: Glad you brought that up because that's just horrifying.

Carly: It's hard because people think that they're eating healthy.

Darin: High fructose corn syrup, GMO, pesticide, laden craziness.

Carly: Yeah, like making Frankenstein out of the most beautiful nourishing food that we have such a history with. I mean, Ancient Egyptians used honey. Across so many cultures, honey has always been a staple and a medicinal nourishing food and included in so many diets. I mean, you've seen in your travels, how important it is for some of the healthiest populations in the world.

Darin: When I got to Bhutan, and then 23 of the highest virgin mountains and the highest mountains in the world, we flew in. Everest was right there. So one of the first purchases I bought from a little dude on the side of a road, Himalayan, I wanted the essence of what was going on in Bhutan, and it was some of the best honey I've ever had in my life. Just this one little fun fact. What is it? One life of a worker, which is a male.

Carly: The forager bees or worker bees are females.

Darin: That's a female.

Carly: Those little girls buzzing around, those are the girls.

Darin: The dude's hanging out at home, so they flipped the whole script.

Carly: It's a female lead society, the beehive for sure.



Darin: They're kicking ass. What's the average life of a honeybee, and then how much do they produce in that life?

[00:23:59] The life of the bees

Carly: During foraging season, and foraging season is different depending on different geographies because, for example, my bees in Canada, they hibernate. So we wrap the hives over the winter. It's too cold. We wrap the hives up so we give them some extra protection, some extra sweaters. But what they do to stay warm, and this is just what bees naturally do which is so interesting, they huddle and they vibrate together and they create a lot of heat in the hive so they can overwinter, so that's always interesting.

Darin: And they're feeding on their supply.

Carly: Oh, yeah. That's a big thing too with overharvesting. I'm very conscious specifically in the colder geographies that we work in and that our bees always go into winter with very good supply. A nice thing that we have going is because we work internationally, we work in different climates, we're able to be like, okay, these guys are chilling, let's give them some extra time to chill, we're gonna go to Brazil now, that sort of thing. That's just always cool to see, but this will bring me into royal jelly nicely, which is another bee product that's super interesting. Worker bees, which are female bees, they, during foraging season will live six to eight weeks. They literally work themselves to the bone, so that's what they do. The males, which are called drone bees, they're a little bit fatter, and they have really big eyes, their sole purpose is mating. They don't really do anything. In the fall, and it's in an area where winter's coming, the drones will actually get kicked out of the hive. And they'll be like, hey, you guys get out, you can go die on your own because they're a drain on resources over winter. They're literally kicked out. They're just there for mating, very interesting.

Darin: That'll be a good plan.

Carly: It's working for the bees. Then the queen bee is very special. The queen bee will have three to five years. The queen bee on a biological level is very different than the worker bee. She'll lay up to like 1,500 babies a day. Regular female bees don't have reproductive organs, so it's really the queen that's populating the hive and she runs the hive.

[00:26:10] What is royal jelly?

Carly: The really interesting thing with royal jelly to bring that back in. So royal jelly, you can think of it as sometimes people compare it to colostrum or like breast milk. It's an incredibly nourishing substance. All newborn baby bees are given royal jelly for the first three to five days of development. Then after the three to five days, they're transitioned off on to a normal diet, honey and pollen.

Darin: So it's a booster.

Carly: Totally. Then the bees to become a queen continues with her exclusive royal jelly diet.

Darin: How do they select that, do you know?



Carly: Literally put her in a queen cell, which is basically a bigger space for her to develop and feed her royal jelly.

Darin: She's the best at the mathematics. She can figure out.

Carly: The interesting thing is that it's pretty random. Just one of them gets the big room and the special diet, and boom they're queen.

Darin: Wow.

Carly: The queen has this exclusive royal jelly diet and just looking how she developed, so the queen is much more robust. If you just Google a picture of a queen bee versus a regular worker bee, she's like jacked. Then laying all those eggs, it has the reproductive organs, lives much longer. So on a biological level, the queen's quite different. There are of course, a lot of variables and everything but that royal jelly diet is a big one. Royal jelly is a secretion from the nurse bees. So the nurse bees make it. It's like all bee products, a combination of different plant aspects in the bees enzymes. For humans, it's been really interesting to explore this, so royal jelly has been used in different cultures very differently as you can imagine. In Eastern medicine, it's really well known as a fertility tonic for both men and women. In Europe, a lot of people are using it for anti-aging properties. Western science has really focused on royal jelly and its neurological effects. Royal jelly is an incredible nootropic and incredible brain booster. Quick little facts about that, it's one of the only naturally occurring sources of acetylcholine, which is a neurotransmitter responsible for brain-body connection. Then it contains these two fatty acids that are only naturally occurring in royal jelly, they're called 10-HDA and AMP N 1-oxide. They basically act as catalysts for neurogenesis. They promote brain-derived neurotropic factor. A nerdy way of saying, royal jelly basically helps your brain to function, it creates new clean neurons. We see a lot of people with concussions, a lot of athletes using royal jelly, members of the aging population. For me, I think my brain is incredibly depleted just by virtue of my job, the society we live in, the tech, the multitasking, the toxins, all of that so I use royal jelly to really support my focus, memory, general cognition. But it's really interesting, there was a study that came out of the University of Warsaw and it found that regular consumption of royal jelly actually improves your spatial reasoning.

[00:29:07] Beekeeper's Naturals Ad

Darin: As a vegan and a plant-based guy, guess what? I love honey. Yes, you heard that right. There is a right way to harvest and utilize the power of bees. One company that does this outstandingly is Beekeeper's Naturals. Their products can offer some real boost to your health that are packed with essential vitamins and compounds that are only coming from the bees that are clean and effective ingredients. My schedule is pretty insane most days, so I need to have a routine to set myself up in a way that leaves me feeling ready. When I started incorporating Beekeeper's Naturals' B. Immune Throat Spray into my routine, it made a huge difference to my throat because propolis is such a powerful medicinal part of what the bees use. This immune-boosting anti-inflammatory compound that the bees naturally create and that we can use is incredible for my everyday health. Yes, I'm constantly talking to people or into a microphone, so this throat spray helps throughout the full day. Bees play such a crucial role in our environment, and Beekeeper's Naturals are truly appreciative and honor



that at the forefront. Their number one necessity is that the bees are happy and healthy. They even partnered with UC Davis Honey Bee Research Facility to raise awareness for and support the pollinator protection. They also send their products to undergo important third-party testing to make sure that their products are free from pesticides and herbicides. So, try Beekeeper's Naturals today. They have an exclusive offer, head to beekeepersnaturals.com/darin, or enter the code DARIN at checkout to get 25% off your first order to start feeling great by including something that's good for you, good for the bees.

[00:31:30] Second Part of the Interview

Darin: So we've got honey, we've got royal jelly, and then the--

Carly: My favorite, propolis.

[00:31:38] What is propolis?

Darin: Propolis. That's so interesting because it's the microbial protector resin from plant and tree and it's so interesting.

Carly: Exactly, it's so cool because propolis is literally taking the plant's immune system and the bees enzymes and creating this super substance. Remember with honey, the base ingredient is floral nectars of flowers, propolis comes from plant and tree resin. So think of sap as the base ingredient. The bees are collecting that and that is literally the immune materials of the plants. They're collecting the sap, the plant and tree resins, mixing it with their own enzymes, and then they create the sticky amber color substance called propolis, and they literally use it to line the hive and keep it germ free. The entire hive is lined with propolis. The inside of the cell walls for newborn baby bees is lined with propolis to create a sterile environment for newborns. They even have a propolis mat at the front door so you can disinfect as you come in, which is very cute. This is an interesting experience I had that sometimes creeps people out, but I'm going to share it because I think you've had enough interesting experiences to not be creeped out by my little one. When I was early into beekeeping, I went into the hive and I saw this weird looking chunk of propolis. I picked it up and I was like, what the hell is-- I was first excited.

Darin: It was in the hive?

Carly: I opened my box and there was like this chunk of propolis.

Darin: Like out of place or something?

Carly: Yeah, usually it's on the walls and I was like, what happened here, but this is my lucky day. I picked it up, and it was a mummified mouse.

Darin: Whoa.

Carly: That was terrifying. By the way, just for everyone listening. That was in my back yard in the woods.

Darin: It wasn't part of the production.



Carly: We run a pretty tight ship. There's no mice interfering. This is when I was 21. Anyways, I freaked out because it was scary. I was in my bee suit, and I was in the zone, and I wasn't really paying attention, and I just saw this big chunk of propolis, picked it up, and then I was like, oh my God. I then learned about what that was, and this is really fascinating. Let's say an intruder gets into the hive like a mouse. There's honey and pollen and beeswax and delicious smells. If a mouse can get in, it will get in. Again, this is my apiary when I was in college, so it was literally in the middle of the woods in British Columbia. It was just me and my friend, John. It's not the operation we have today. Anyways, so if a mouse can get in it will because there's delicious stuff in there. The bees can sting a mouse and kill it but they can't physically pick up a mouse and carry it out of the hive. They can't do that. Think about a bee versus a mouse, even the whole hive, they can't carry it out. So what they'll do is they'll mummify the rodent in propolis. It's that powerful of an antimicrobial, anti-bacterial protective substance that it insulates all the germs from this decaying rodent from the rest of the hive. Think about us as humans, if we had a dead body in our living room, a lot of disease would occur. We would get quite sick just living in close vicinity to that. The propolis is that powerful in encapsulating the germs and bacteria. I like to think of that as like a little metaphor for if you are dealing with something, some sort of immune situation or exposed to bacteria, propolis is a really great way to calm the body down, support your overall immune health. That was a really interesting experience. Then upon further research, I learned about how propolis was actually a part in some cases of the mummification process in ancient Egypt. This is really crazy to me, I'm always blown away by how much we figured out and then how much we moved away from what we knew and know intuitively.

Darin: That's such a Pandora's box right there because we're littered with that. Talk about solutions we've already had, the explosion of the 1900s in terms of clean energy tech. We've had so much knowledge. But you're right, the ancient knowledge again, we know so little about it but anyway, continue.

Carly: I want to talk more about that because I just find that interesting, and I've had so many experiences that I'm honestly baffled by. The first recorded human use of propolis dates back to 300 BC. A lot of people talk about propolis.

Darin: Specifically propolis.

Carly: Specifically propolis. A lot of people speak about propolis as the original antibiotic. In the Boer War, they were using propolis and honey to dress wounds for its antibacterial effects. Socrates was a fan of propolis. It's said that Aristotle coined the term propolis which means defender of the city. If you look at different cultures too, the Assyrians would drink propolis. It's written about propolis being used for anti tumors, all kinds of stuff, all kinds of stuff across different cultures. Then just looking at the research of today, there's some from accredited academic institutions, there is some really strong research about the effects of propolis on the immune system, the anti inflammatory benefits of propolis, the antioxidant count propolis ranks higher than blueberries on the ORAC chart for antioxidants. There are over 300 beneficial compounds in propolis, one of them being Pinocembrin, which acts as a fungicide in the body and has positive effects on our brain. It's such an interesting and historically rich substance that we almost don't know anything about in North America. It's so



wild because in other parts of the world, it's massive. I mean, you've experienced that yourself.

Darin: The sweet cousin of the honey gets all the attention, but the power of medicinal side of it is, again, we go back to why is this not a thing because it's been around for so freakin long, probably every culture, I would imagine? It has used it. I've found other medicinal plants, like the king of all mushrooms, chaga. You look at every major, and that's my dog's name, every major society who conquered and were strong were using chaga. You look at stuff like this, and propolis I guarantee it's probably got the similar history but yet somehow, our idea of health care has been taken over by this fear of the natural world. Therefore, I have a solution vis-à-vis drugs and shots and all of that stuff. Of course, there's places for all that stuff, not saying that. But let's lean on our nature, let's lean on our history here.

Carly: And start by caring for yourself versus not caring for yourself getting super sick and then needing any form of intervention.

Darin: Dr. Furman gave me a stat that he looked at for years and determined through many different protocols that only 2.5% of all Americans of the 330 million people were deemed healthy, 2.5%. So we're running around sprinting towards heart disease, diabetes, cancer, you name it, living in this weird ass food nutrient desert that we've created for ourselves. Then the infinite compounds, and the infinite health aspects of food has gotten me made a career out of it. I was so excited because I didn't want to do a bunch of research before I talked to you, I wanted to hear from you because it's just so freaking amazing to me that in this day and age, you're talking about propolis, which I guarantee people all of you listening, most of you have never ever, ever tasted it, or experienced it. It's one of the most ancient medicines. And we're talking about right here in 2022.

Carly: It's such an easy thing. I use propolis every single day. For me, it's transformed my immune system that's why I got into all of this. It's so interesting that these tools that should be super accessible and super well known and are easy and affordable are completely obscured.

Darin: Totally. Well, it's part of the reason again, why I was so excited to talk with you and and really Luke's story was the first place I heard and I love Luke and I love what he's been doing. I honestly, every so often getting some raw local honey I would get but for the most part, I would just stay away because I know too much about the supply industry.

Carly: You don't know where it's coming from.

Darin: You have no idea.

Carly: I've tested honey from farmers markets and this kills me and I'm hesitant to even share this because the last thing I want to do is make people feel alienated from farmers markets because there are some unbelievable beekeepers. But I've had the experience at farmers markets where I did pollen mapping, and it was not from the local source they claimed. A lot of times people will work in commercial pollination services and then kind of their halftime gig is to be at the markets. And because they've worked in that commercial pollination, they'll actually source bee products from some other geography or some other



person, usually a mass producer and either combine them with their bee's products so that they can have enough of a supply or just sell bad the market.

Darin: Such a bummer when that stuff happens. Let's call out to all the beekeepers out there, all of the ones that really care. Do you think it's affordable for them? Listen, I've done tons of testing and stuff on all kinds of nutritional products. For the most part, it's not that difficult to do any sort of test, it's a matter of realizing that it's possible and it's what a couple of 100 bucks to do a pesticide panel on your bee. It's a thing. Every beekeepers should know that their bees are three to five miles cruisin everywhere. If you care about the bees, if you care about selling it, a healthy product, you should be doing a pesticide panel. It was my idea.

Carly: Hundred percent. But here's the pain point from the beekeepers and I'm saying this as somebody who cares so deeply about this and has had this conversation with so many beekeepers, and there's been so many people where I'm like, ey, if you just do the test, my company will be your client. Sometimes people do go in that direction, they're like, okay, I don't need to do migratory beekeeping. This company will pay me a premium to do stuff the way I actually want to do it, but you can make a lot of money in commercial pollination services. You get paid per acre. I know beekeepers making \$600,000 a year in commercial pollination. Of course, it's a spectrum and I'm using somebody at a different end of it, but I understand from their perspective. By the way, just to go back to the last thing I said, there are some incredible beekeepers at the farmers market and it's as simple as a conversation, just ask. I don't think someone will lie to you, and I think it's pretty transparent.

[00:42:50] The challenges for beekeepers

Carly: Just ask where their products are coming from, where they keep their bees, if they've done a pesticide test. But here's my challenging point with all of this and the extreme compassion I feel for my fellow beekeepers. Let's say you live on this beautiful plot of land. It's been handed down in your family, you've taken care of it your whole life. Then all of a sudden, some big fancy rich blueberry producers start buying up the land next door. All of a sudden, your bees and your everything, everything you grow is being exposed to pesticides, what do you do? You can't necessarily uproot yourself. I do have beekeepers. I actually have one beekeeper in mind who we've been working with for the last three years who actually fully moved and restarted and has grown up as a partner to our brand. We've been able to really support each other and it's beautiful. But the bigger problem has to do with our country's regulation of pesticides because as much as I want every single beekeeper to be running these pesticide tests, and I want to be able to work with every beekeeper in America and do that, I also understand that you can't financially compete with this massive company that's just buying up land all over and spraying it with all this crap. That's where I really want a call to action is to get involved with your local government to start making noise and something that anyone can do. If you have bees on your property, and you are concerned about the surrounding land, plant the craziest surplus of clean flowers you possibly can because it does help. Even if you don't have bees on your property, I always tell people, it's so simple just plant stuff, just let some stuff grow because the bees are really missing a clean food source and the more we can give that to them, the more we're supporting them.

Darin: I love that. It just gets me fired up around out here because I'm like in a situation where obviously there's a lot of land and I've seen a ton of bees, they haven't blossomed yet.



But all throughout these hills is what's called like a Mexican sunflower, and so we'll pop these yellow. This whole this whole hillside and in by the river will be these yellow flowers.

Carly: Beautiful.

Darin: It's just unbelievable. The bees are gonna go crazy. So, propolis, royal jelly, honey, sustainably harvesting, your definition of it, I'm familiar with that because the definitions that are out there, you have to actually educate and explain. Education of this whole thing, that's got to be at the root of your business because you're literally re-educating America and beyond is what these things are. It feels like you're the only one that I've seen on a growing business perspective that is doing this.

Carly: There are other people doing really great things, but I will say that my team, as we've grown it, we really share values. I'm not just talking about my team in terms of like our beekeeping partners, I'm talking about my corporate team. One of our head of growth, he's a former lawyer, and when he joined the company, he's like my best friend from growing up. He was an M&A lawyer and he wanted to join the company and I was like, you have to have beekeeping experience because we're a sustainability first company. I kind of thought that he would be like okay, whatever, I'm not going to do it, I'm not going to go become a beekeeper, but he did. He did a beekeeping apprenticeship course, came back to me a few months later, and he was like, I rescued three swarms, can I now join the company? I was like, hell, yeah. So everyone at the company, we've been able to really create a culture of people who care. At the core of this company, there's a real kind of rebellious attitude because we're looking to just disrupt multiple industries. We're looking to disrupt the supply chain when talking about bee products, looking at different growers, different farmers. We take that into everything we source, our chaga, all of it, we take sourcing very seriously. I'm kind of like silver lining of my autoimmune stuff is I'm kind of blessed with that because it forced me to really dive deep into researching, sourcing and efficacy and all of these different things that were just like, I can't eat without knowing. That sort of shaped us in a really nice way. We're trying to really disrupt there. But then we're also trying to disrupt health and wellness and really empower people to have tools to stay well, to feel better, or to have the option to choose a natural option because not everything is for everyone and there are sustainable, healthy solutions that can be incorporated into a day to day that can change your lifespan and life quality, and I really believe in that. So it's something that is just foundational to everything we do. I'm a beekeeper first. I was beekeeping before I started this business, and that's my passion, so just staying with that.

Darin: That's amazing. Well, I am now more inspired and I definitely want to do that here. It's just too great. Before you go, let's unpack your journey a little bit because you not only have been a beekeeper, but you suffered from a health perspective and you've built yourself back on the backs of bees. So tell me about that story because I know you lightly did when we first met. I think it's important because again, you owe a lot to them and there's this shared relationship because they've supported you and I think it's a beautiful story.

[00:48:28] How bees changed Carly's life

Carly: Not to be like super hippie dippy, but I really owe everything to the bees. I found my passion, my calling. Working with the bees connected me to nature in a different way.



They're just fascinating creatures, to say the least. For me, I'm autoimmune. Growing up, I had chronic tonsillitis, so it certainly wasn't like that.

Darin: It is inflammation.

Carly: A lot of inflammation and I had all kinds of joint things but with my autoimmune, I can't take antibiotics. I'm allergic to most strains of antibiotics. I would have tonsillitis once a month. As a little kid, I would be sick, maybe anywhere from like one to three weeks a month.

Darin: Do you know what was the spark of kicking in your immune system so heavily?

Carly: I don't know. It's really hard to say and I've done this with my parents so many times where I've like, everything we're eating.

Darin: What did you do?

Carly: They were like, chill out.

Darin: Did you go through the birth canal and everything.

Carly: Yeah.

Darin: You're breastfed for a period of time.

Carly: Yes, all the normal stuff and my sister was always fine, immune wise but I was just immunocompromised. I also have psoriasis and also the only one in my family with that fun thing. The tonsillitis was really a bummer because being a little kid, missing school, it was crazy and I got sick so easily. I just had such a weak, fragile immune system. Typically, with a kid like that, they got their tonsils taken out, move on. But for me with my inability to take antibiotics, getting my tonsils out was problematic and dangerous. I saw every ear, nose and throat doctor, every specialist. My parents, God bless them, did a real run around trying to figure out why I was just sick all the time and missing school and missing out. I just didn't fit into the traditional medical model at all. I could not find answers. We spend a lot of money and it was really challenging for my family. As I got older, I started to do my own research. I started to obsessively research food and drugs and medicine and this and it was from a very selfish place. I wasn't at that time looking to impact the world at all, really just looking to try to lead a normal life. I found a lot of beautiful things. I learned so much about nutrition at such an early age. I was really honing my research skills and a lot of things that I incorporated that had a positive impact, but I was still sick very often and that continued through college. When I was in my 20s in college, I did a semester abroad. I was studying abroad in Sweden, but during that time, I was traveling. My plan was to travel all around Europe. I got there, loving it. I went to Italy to meet up with some friends who were also doing an abroad program. The second I got to Italy, I got very sick with tonsillitis, and my tonsils would swell up to the point where I would have terrible breathing issues. It was very, very hard to breathe. My whole face would swell up. It was pretty crazy. It's funny because sometimes I talk to people and they're like, oh yeah, I've had tonsillitis. I'm like, yeah, it can get pretty bad. It was very hard for me to breathe. I was like, oh, my goodness, I'm gonna have to come home, and I busted my butt waitressing to go to Europe. I had missed out on so many



things at that point and I was just determined. I was like, I don't care how sick I am. I'm gonna figure this out. I can't really tell people how sick I am which was a little bit irresponsible but we do things in our 20s. I found this pharmacy in Florence and this very knowledgeable pharmacist who spoke English. I went to meet with her and this was through recommendation of my friend's parents who live there. It was the whole thing. But I spoke with her and I went through my long list of allergies and my autoimmune history and all these things. She was just like, you need propolis. I was like, okay, what's that? She's like, from the bees. I was like, oh, honey? I've had honey. She's like, no, propolis. It was so obvious to her. So she gave me this tincture of propolis. She had me using it twice a day, just putting some drops into water. In five days, I made a full recovery, which I had never had that experience before. For me, propolis functions in my body the way antibiotics do for most people, that was my experience. I started using propolis every day, I went back and was going nuts and she's like, you can use it every day. She explained it to me. Then I went on PubMed and went really deep down the research rabbit hole and propolis and I was like, oh my gosh, this is safe for me to take every day. It can actually meaningfully impact my immune system. Bee products are immunomodulatory agents, so they're great for people with autoimmune and really work nicely with your body to stabilize. It's antiinflammatory, all of these different things. So I started incorporating it into my everyday. I had a pretty radical health change. As I was traveling around Europe, I found all of these products were commonplace. I remember going into a coffee shop in Copenhagen and ordering a smoothie and they put pollen on top and I was like bee pollen, okay. Now I use bee pollen everyday. Bee pollen is literally the best natural multivitamin ever, just a teaspoon. It's like the most bioavailable multivitamin nutrient dense food you could have. The pollen, just for everyone, it's the protein source of the hive, and the bees pick it up on their hind legs. So they have these little hairs on their hind legs, and they basically get into the flower and they pick up the pollen, mix it with their enzymes, and they carry it in like balls on their hind legs. It's called their pollen pants, which I always think is adorable. They bring it back to the hive and it's the main protein source. For humans, you can think of it as nature's multivitamin, broad spectrum vitamins and minerals, rich in amino acids. There's been studies found that bee pollen actually increases your endurance, which is super cool. It helps to oxygenate the blood. It's just really great. A lot of people who have nutritional deficiencies, the first thing I say is get some pollen in you. A lot of people think of pollen for allergies, but I actually don't recommend that. I think that it can be a little too stimulating. I recommend propolis for allergies, but some people swear by it for that. But anyways, I just started seeing these bee products everywhere. I became obsessed. Never in a million years ever thought I would start a company or do anything like that. But when I went back home to finish up college, I couldn't find propolis anywhere when I was back in North America. I couldn't find it anywhere, so I started beekeeping. Then I became really crazy. I became really obsessed. So I just completely fell in love with that. I had this dream of starting a bee product company. But like many students, I was graduating with negative funds, and I think there probably have always been incredible resources, but I wasn't drawing on them. So I didn't really have the confidence to start a business. I wasn't reading the right things, listening to the podcasts and all the stuff that I now do all the time. I just never thought that I could do something like that. I had a pretty good job offer out of school. I went into finance. I was working as a pharmaceutical researcher at a hedge fund, and I needed money. So I was like, I'll do it. I was in finance for a few years. I ended up at Goldman Sachs. Then I started to really struggle with my mental health. I had an incredible experience and was fortunate to work at a prestigious place and I learned a ton and all that



stuff, but I was really struggling with an anxiety disorder. I was having really bad panic attacks. I was not sleeping, I was really unhappy. I was just really doing something that was outside of my value, inauthentic to me at the end of the day. I kept coming back to this bee product company and idea. Eventually, I was just too unhappy, I need to do that. Everyone thought I was having a mental breakdown and it was like the biggest mistake of my life and now it's my mental breakthrough and the best thing I ever did, but that's how I started my company.

Darin: That's amazing. Just out of curiosity because now I'm thinking of this property, but how big are your normal hives that you work with?

Carly: This would definitely be big enough, if you wanted to get an operation going on here, we could do that. They really range in size. As I said, we've been able to grow with people. Our apiary partners in Brazil have really expanded. I actually need to go out there once I can travel a little more easily, but it ranges in size. At this stage, we're typically working with people who have like at minimum 200 hives now, and they're pretty in the middle of nowhere, but we're super open. If there are sustainable beekeepers that want to partner, always reach out to the company. We're always looking for great partners that want to do things in a clean, healthy way.

Darin: That's cool. I know a lot of people right now just heard some of the stuff for the first time and I support people taking control of themselves, their life, their health because we are literally supported by the nature. Again, I just love the fact that you're supporting the bees along the way, and the bees are thriving as a result, and then we get to thrive. There's a perfect interaction between us thriving with them and us taking care of them as well and the environment. Obviously, we're not doing a good job of that on a big scale, but we can do better. So thank you for all the work you've done. This has been awesome and enlightening.

Carly: Thank you so much for having me. This has been an amazing conversation.

Darin: Right on. Thank you.

[00:58:03] Podcast Outro

Darin: Thanks for tuning in to this episode of The Darin Olien Show. I hope you took something valuable away from this conversation that will help improve your life in some way. If you'd like to learn more about my incredible guests, you can find all of their information in the show notes on my website. If you enjoyed this episode, or even you didn't like it, please rate this podcast. The team and I value your feedback so we can continue to give you the most value possible. We want you to get the most out of every podcast. So please rate, subscribe, share anything you feel called to do. I truly appreciate it, and I love and value your support. So, thank you, and I'll meet you in the next episode.