Getting Curious with Jonathan Van Ness & Aviaja Lyberth Hauptmann

JVN [00:00:00] Welcome to Getting Curious. I'm Jonathan Van Ness and every week I sit down for a gorgeous conversation with a brilliant expert to learn all about something that makes me curious. On today's episode, I'm joined by Aviaja Lyberth Hauptmann, where I ask her: What's on the menu for Arctic Indigenous communities? And before we jump into this episode, I want to give you a little bit of a little story of how this episode came to be. So basically we did our episode about cheese and the history of cheese, how cheese is made, and we got such a huge amount of feedback from some vegetarian and vegan friends, more vegan friends that were really, really angry, really, really, like instantly super upset. And I do think it was interesting in the cheese episode because even though it was centered around cheese and yes, cheese comes from the agricultural system, blah, blah, blah, it's like the whole thing. There's a whole spectrum of cheese farmers. There's a whole spectrum of how, how cheese comes. There is a whole spectrum of the way that it's made in terms of scale. And also in that episode, there was a lot about legalities in the United States about, like, food systems in general that affect all of us, no matter if you're a meat, dairy eater, vegetarian, whatever.

If you've ever seen my comedy show, you know, I talk a lot about duality. While we do have a, I think, out of control agricultural system in the United States that does see us kill as Gabe [Rosenberg] taught us, like 10 billion, I think he said, sentient beings, but a huge amount of sentient beings a year between chickens, pigs, cows. Well, a lot of it goes to food waste, which I think is horribly wasteful. There's too much animal suffering in the United States, and at the same time, a plant based diet does not work for everyone everywhere. There are so many indigenous communities around the world that cannot support that lifestyle. I just think that's really interesting. I also think that we do eat too much meat in the US. We do not understand how to really be environmentally friendly with our livestock practices, but I actually think that there's a lot of learning to be had in the way that Indigenous communities are sustainable with eating animals and the way that they do in the way that they honor the animal and the way that it is so important to their culture. So that's where some of the inspiration for this episode came from. If you are just like, Fuck off, Jonathan, I cannot listen to that, then this is not the episode for you. But if you're interested in where this kind of curiosity came from, which is like what communities and what places like are not served and cannot have a plant based diet, that's where the curiosity came from. This is an incredible episode. I loved meeting Aviaja. And let's jump in.

In 2022, we spent a lot of time understanding that there is no perfect or universal way for us to enjoy food. We also learned that colonialism has affected the kinds of foods that are available to Indigenous peoples across the globe. Honey, did we ever. Today, we're going to learn even more about microbes and food sovereignty in the cryosphere. We're going to have so much fun today. Let's welcome our guest, Aviaja Lyberth Hauptmann, who is a microbiologist from Nuuk, Greenland. She is an Assistant Professor at the University of Greenland. She is currently interested in food sovereignty, Inuit fermented foods, and understanding human connection to nature through microorganisms. What we're asking today is: what's on the menu for Arctic Indigenous communities? Aviaja, thank you so much

for giving us your time. And also, I just have to say to everyone, cause, like, this is a podcast and you can't see. Aviaja has the fringe of, like, just the century, the shine on the fringe. I'm trying to do this thing, well, I used to do the thing where I try to not compliment our guests on, like, physical stuff, cause I was just trying to be, like, fierce and, like, academic. But as it turns out, I'm still a hairdresser and always will be.

AVIAJA HAUPTMANN [00:03:42] And I love it.

JVN [00:03:44] The fringe is just life, it looks so amazing on you. I love your glasses. We'll have to put it on the feed so that people can see, like, just how chic you are. It's amazing. So, first of all, Aviaja, how are you?

AVIAJA HAUPTMANN [00:03:54] I'm good. I'm so excited for today. I've been really excited and thank you for the compliments.

JVN [00:04:02] Oh my God. Of course. I think food is such a personal thing and we all have to eat. We all have such strong opinions about the way that we're going to eat. So just to, like, kind of get us grounded in our conversation. Let's start with, like, the basics on Greenland's grocery stores, because that is, like, a really fun alliteration that I am so excited that we're going to talk more about. Can you walk us through the aisles of a grocery store in Greenland?

AVIAJA HAUPTMANN [00:04:26] Yes, I would be happy to. I might not even have to say that much because it's pretty similar to a European grocery store aisle. We have somewhat the same shops and the same items in Nuuk, at least, as you would find in Copenhagen, for instance. So important to say here is that Greenland was colonized by Denmark 300 years ago. As you said before, we all have to eat food. And food is really such an interesting lens to look at people and to look at history and to understand what dynamics are at play today. And what you see when you go through the vegetable aisle or any aisle in, in the grocery store in Greenland is that we are part of Denmark, even though we live in the Arctic. We came from a completely different food culture. Today, what you see in the stores would be exactly the same that you see in Copenhagen.

JVN [00:05:23] I didn't know that. Okay. Interest. Fascinating. Can't even get enough. Also in Copenhagen, like, I guess I haven't spent that much time thinking about what the food's like there either. So, like, what would you find in the grocery store in, in Nuuk?

AVIAJA HAUPTMANN [00:05:37] In Copenhagen, you would find a lot of the same things as you would in the U.S., except some basic differences, like we have the open-faced sandwich, rye bread, which is a very Danish thing. So, beyond that, we could also compare the Greenlandic food aisle to a California food aisle. I just spent a year in California recently, and we ate a lot of the same foods there as we do here in Nuuk. But that is in, in very big contrast to what our original foods are or what our Indigenous foods are. And those foods are—like, what characterizes Inuit foods, Greenlandic foods, is that they're animal-sourced. We used to eat very, very little, a few plants and only certain times of year.

And a lot of the animals are marine mammals, like whales and seals and walruses. And then there are birds and also some land mammals like the caribou and the musk ox.

JVN [00:06:34] Mmm! Oh my God, I can't wait to get there. Okay, so, because Greenland is in the Arctic, right? So, like, getting food there is probably, like, expensive, cause there's a lot of stuff probably doesn't grow because it's so cold?

AVIAJA HAUPTMANN [00:06:48] Yes. So almost all of the foods that you'll find in our grocery stores are imported from Denmark. And it can be done fairly cheaply because our whole import system is set up around getting foods in from Denmark rather than trying to figure out how to distribute our own foods around the country. So Greenland is huge, of course, but we can't really distribute foods within Greenland because all of our logistics are made so that foods are imported from Denmark. So of course, the fact that we have to transport most of the foods that we see in the stores to Greenland is reflected in the prices. And that's especially on the vegetable aisle. So Danish is a huge exporter of pork. So you can get pork here very cheaply. And that's something that's common to different Arctic areas, the pork has sort of taken the role of a lot of the local meats. But the vegetables, like a broccoli, will cost around $8. And the same with the cucumber. Now, you might be able to get it for around, like, $5, $6. So but those are the prices. And I think it's important also to add that the broccoli or the cucumber that you'll buy won't be the same as the ones that we got in California, for instance. Those will be sometimes pretty moldy or yellow or mushy, not the same standard because, it does affect the vegetables that they have to be transported quite far.

JVN [00:08:20] In Nuuk and in Greenland, like, does a vegetarian or vegan exist? Like, could you exist there and be vegetarian? Or, like, would you just, like, keel over because you would only be living off of, like, yellow broccoli that was, like, $8 a bushel?

AVIAJA HAUPTMANN [00:08:34] You would have to have quite a lot of resources to be a vegetarian here. There are vegetarians here. And I, I don't know how they fare, but I'm sure it's, it's more expensive than if you're not a vegetarian. But you can get a high diversity of plant foods here. So I think it's definitely possible, especially today with a lot of more processed alternatives that are plant-based.

JVN [00:09:00] Mmm! Is the reason that it kind of got that way, like, the reason that the food culture was so disrupted to, like, Indigenous communities in Greenland, like, because of the colonization by Denmark? Is that, like, how it kind of got this way?

AVIAJA HAUPTMANN [00:09:15] Yeah, definitely. There are many factors at play, but through colonization, Inuit were sort of integrated into a capitalist system where blubber and fur and down and these kinds of things were important to the colonizer, to the Danish government. So the emphasis was put on getting a lot of these things rather than feeding yourself, and that resulted in people not feeding themselves and that created a foundation for shops. And of course, we all love diversity in the kinds of foods that we eat. So when suddenly there's rice or sugar, definitely sugar, and these kinds of things, people do want

them and integrate them into their food systems. So slowly that has progressed to a state where now we basically have a replica of the Danish food system.

JVN [00:10:13] So, like, what would a traditional, like, Greenlandic diet look like? Like before, 300 years ago? Like, like, where would these foods have been sourced and, like, what was, like, a day to day? And, like, who was in Greenland 300 years ago? Like, what was going on?

AVIAJA HAUPTMANN [00:10:28] Yeah. So if we time traveled back 300 years ago and met the population of Greenland, it would have been Inuit and Inughuit. So in the very northern part of Greenland, you have Inughuit and then in the rest of Greenland you have Inuit, and we are all part of the same ancestral line coming from Canada and Alaska and Russia with our own culture, our own languages. And the foods that we've eaten in Greenland have been, like, the, you know, bread and butter, our everyday foods would have been the seal and everything from the seal. The seal has definitely been the most important food source. And what has kept us thriving in the Arctic. And then during the seasons you would have: some seasons you would have eggs from birds, some seasons you would have the birds, some seasons you would have the walrus or the whales. The narwhal, for instance, would be also important food sources.

JVN [00:11:30] And would those have all just been sourced, like, locally, like, from, like, the oceans and from, like, hunting and stuff?

AVIAJA HAUPTMANN [00:11:36] Yeah. Everything would be built up around feeding yourself. You would have hunters, that was what we all used to do once, hundreds and hundreds of years ago, is just spend our time being together with family and feeding ourselves. So the hunter would go out, maybe in the morning, and then come back in the afternoon with the seal or more seals, and then those would be prepared for the whole village.

JVN [00:11:59] And how has that hunting, like, evolved? And, like, does it still go on, like, are any, like, Indigenous peoples in Greenland, like, still getting, like, to eat the seals and, like, getting to do like their kind of, like, traditional diet?

AVIAJA HAUPTMANN [00:12:12] I think that's such an important question because it has evolved and today it has been integrated into a capitalist system so that we have quite heavy capitalist incentives in our hunting, such that the hunters associations are having to not just think about feeding their own families and making culture thrive, but using hunting as a way to earn an income. Because we are part of a global economy and everyone wants to be that here. It's not something that we, we're not interested in being. But, but that is a very important difference. When you introduce new incentives into a hunting culture. But I feel that something that I love about having my children grow up in, in Greenland is that we still go hunting as families or go fishing as families. And there are very, I would say, probably no children in Greenland that do not know where a fish filet comes from. They've been pulling out fish from the ocean themselves. So they know when we eat something that comes from someone that was a living being, and that's not strange or sort of weird to

them. And I really appreciate that. So, so we still have quite a close connection to the hunting culture, but it's more—for the hunters, it's a profession, but for most families, it's also part of family relations.

JVN [00:13:43] So how would you explain the need for an animal-based diet to people who may not understand the tradition and importance of it?

AVIAJA HAUPTMANN [00:13:51] So for us, for Inuit, it's important for people to understand that our culture, our self-worth, our traditions, our family relations, all of these things that are basic to the human experience are dependent on this animal-sourced diet. It's nutritious, but it's also a very important cornerstone of who we are. And saying that we should eat a plant-based diet is essentially saying that we don't have a right to exist.

JVN [00:14:27] Hmm. Can you break that down a little bit more? Because I think that's, like, a really big sentence for some people to understand. Why do you think it's so important to return to that, like, more traditional diet?

AVIAJA HAUPTMANN [00:14:42] There are so many reasons that, that I feel that's important. One thing is that we have really nutritious foods here. And the foods that people choose to eat today based on what's in the grocery stores, not because that's the only thing in the grocery stores, but that's just what naturally happens all over the planet, is that people eat some of the not so nutritious things like the white bread or the sweet things, the pasta, all of these things that aren't really very nutritious but are cheap and easy to make, and that can last for a long time. And we have sort of, to some degree, switched out these very nutritious foods for some of those not-so-nutritious imported foods.

But then there's also the fact that foods are so much more than foods. And that is really what you can see when you dive into Indigenous peoples' food cultures. It's that when you go hunting, you use your body, you are in the environment, you have a relationship to nature, you are physically active, but also very importantly, you need to know how to do the things to get those foods and you get that through your family. And that's still how we do it today. We get that knowledge about how to go hunting. My family has a very long tradition of caribou hunting in a specific place in Greenland called Angujaartorfik. And my family goes there every year with all the children and the grandparents and everybody goes, and go hunting, dry meat. And we have to learn from my uncle, for instance, or some family member how to, to hunt. So there's an important element of tying together generations. And I feel there's really few things that, that make you sort of as self-confident as being able to feed yourself. I think that's a really important thing.

JVN [00:16:37] Yes. So now we're moving from, like, the macro to the micro. So what is a microbiome?

AVIAJA HAUPTMANN [00:16:48] A microbiome is the microorganisms and all of the genes that those microorganisms have in a certain environment. So you could say we have a mouth microbiome, we have a mouth full of microorganisms, and they have certain genetic capacity. Or we have a hand microbiome or there's a soil microbiome.

JVN [00:17:11] Doesn't our skin have a microbiome?

AVIAJA HAUPTMANN [00:17:13] Everything has a microbiome.

JVN [00:17:16] That's interest. Okay. So can we find one, like, like, on a plant or, like, what about, like, a lake or, like, an ocean?

AVIAJA HAUPTMANN [00:17:23] Anything.

JVN [00:17:24] Cause it's literally any living thing.

AVIAJA HAUPTMANN [00:17:26] Also not living.

JVN [00:17:28] Oh yes! So also not living.

AVIAJA HAUPTMANN [00:17:29] Yeah, there are microbes everywhere. And that's what's really fascinating about them. They are able to do the weirdest things and they can live in the most extreme environments and they will find a way just to survive just about anywhere.

JVN [00:17:44] Okay, interest. So in what ways do micro-organisms in the Arctic exist outside of what we consume?

AVIAJA HAUPTMANN [00:17:52] One of the things that I used to work on was microorganisms in snow and ice environments, the cryosphere. So the Arctic is an area with some extremes in dryness and in cool and also in pH. So what could be interesting to talk about is that some of these microorganisms, they have adapted to quite extreme environments. They have all sorts of skills that might be useful to human beings in an industrial setting. So biotechnologically we could use these microorganisms. And that's some of the focus areas that exist in microbiology outside the human-microbe relationship.

JVN [00:18:35] That's fascinating, I think I was reading about some, like, pink snow, that's, like, not as nice as you think that it would be, but it's, like, similar to that. Okay, so we know that microorganisms are not only around us, but also a part of us. Why is that connection so important for us to remember?

AVIAJA HAUPTMANN [00:18:53] So human health is completely dependent on these microorganisms, and that's a field of understanding that's really developing fast these days. The whole gut microbiome field is showing us that not just physical health, not just stomach health, but all aspects of health, including mental health, is dependent on our relationship with microorganisms. And there has been a lot of changes in that relationship in the past generations. And I would say for European American contexts, that change has gone through from hunter gatherer societies through a long period of agricultural societies, and then now to industrialized societies. In Greenland, we've gone straight from

hunter-gatherers to industrialized society, and that has really made some changes in our human-microbe relationships.

JVN [00:19:53] Mmm. Like what?

AVIAJA HAUPTMANN [00:19:56] We don't know yet. That's something that we're, we're working on. So in general, what we know is that we co-evolved, human beings co-evolved with microorganisms and parasites. And because we needed to be able to tolerate a certain amount of parasites and microorganisms from our surroundings, from our foods, especially from agricultural animals, that has made it so that our immune systems need to function with those present. And there's this important hypothesis in microbiology called the "old friends" hypothesis. And what that hypothesis says is that once we have sterilized our lives, industrialized our lives, gotten rid of all of the parasites, we are missing them to balance our immune systems. And the way that we see it today is through increases in autoimmune disease like allergies, asthma, eczema, diabetes, and even depression is also connected to this.

JVN [00:21:01] And then the importance of having a diverse gut biome is just, like, health?

AVIAJA HAUPTMANN [00:21:07] Yes. So there is a general understanding that you need to have a diverse gut microbiome. And that's discussed, like, "How diverse?" or, "Is diversity always equal to more health?" But in general, the gut microbiome, it's an ecosystem and ecosystems in general are more robust when you have more diversity. So if you have a highly diverse microbiome, then you would probably have more robustness against invading microorganisms that might be pathogenic or pathogenic if your gut microbiome isn't robust. So you just have a more stable stomach if you have a diverse gut microbiome.

JVN [00:21:48] Okay. That makes sense. Okay. So what foods cultivate a healthy, diverse gut biome?

AVIAJA HAUPTMANN [00:21:53] That is a very interesting question. And I'm sure that if you Google it and you look at the images that pop up, if you do a Google image search or even at the articles that you'll find, they will all say that you need to eat a diet that's rich in plant fiber. And that is because when you eat plant fiber, which our human bodies cannot degrade, some of that fiber ends up in our guts. And down in our intestines, the gut microbiome will start degrading the plant fiber that our human bodies cannot degrade. And that results in these little molecules called short chain fatty acids that are important to human health. So in that way, the microbiome helps us by degrading foods we can't degrade and supplying us with healthy molecules. But this is an interesting question, because if we did that time travel back to Greenland 300 years ago, we essentially didn't eat plant fiber. So that's also a little bit of why I got into this, because I kept seeing all this literature on the gut microbiome, which is super interesting, but there was just no understanding of how you can live off an animal-source diet and have a healthy gut microbiome. We simply don't understand it. And because we don't understand it, there's the misconception that you can't live a healthy life without plant fiber.

JVN [00:23:25] You said certain seasons, like, there would be vegetables or, like, there could be vegetables, so, like, what could grow in Greenland, like, sometimes.

AVIAJA HAUPTMANN [00:23:32] So the few plants that we've eaten would be the angelica where we eat the stems and the leaves. It's quite strong, like a celery, almost. And berries. So crowberries and blueberries. And other than that, there are other flowers and plants that can be eaten but won't really provide you a lot of nutrients because you will not be eating that much.

JVN [00:23:56] So it's like a handful.

AVIAJA HAUPTMANN [00:23:59] Yeah, yeah. More like herbs.

JVN [00:24:00] Yeah. So there's, like, two berries and some celery.

AVIAJA HAUPTMANN [00:24:04] Yes. Yeah.

JVN [00:24:08] Got it. It's, like, not, like, that *that* much.

AVIAJA HAUPTMANN [00:24:09] There's a section of the, I guess, 300-years-ago plant aisle which is quite interesting and that's the plants that animals have eaten. So what we did eat more of would be half-digested plants from the stomachs of other animals. So even when we were eating vegetables, they came from an animal source like the caribou stomach content or the ptarmigan. This little bird stomach content would have been eaten and still are eaten today.

JVN [00:24:42] Okay, let's get into that. So you get the caribou or the bird and then you get the tum tum and then you cut that little thing right on open and then you just, like, sautee the insides of it?

AVIAJA HAUPTMANN [00:24:53] Basically just eat it raw. So that was a little bit my entry into this whole field because I went hunting with my family and I was mapping the microbiome on the foods that come from our hunting traditions. And one of those were, of course, the content of the caribou stomach, all of these plants that lie in there and are degraded by the caribou gut microbiome. And that whole thing, what you would usually be doing is that you take the liver, which is a very important source of nutrients, and you cut it up into smaller pieces and then you stuff it into the gut of the caribou that you've shot. And then you let it sit there for a little bit. It's acidic, so it will sort of fry with the acid of the caribou stomach content and then you eat the liver.

And there are a lot of interesting aspects to this. One thing is that you can preserve the very important vitamin C from the liver. The liver is a good source of vitamin C, which can be hard to get from an animal-source diet, but vitamin C is preserved well when it's in an acidic environment like the stomach of a caribou. And also, you would of course be eating these microorganisms. And I had this sort of revelation when I was looking at the sort of

microbial data from the study. “Okay, if we had gone back 300 years ago,” and we had brought with us, like, the Danish food pyramid that says you need to eat a lot of fiber-rich bread, for instance. And we would have looked at this population that didn't eat fibers at all. We would have thought, “Well, there must be something terribly wrong with your gut microbiome. So here, here's lots of fiber-rich bread.” We in Greenland would not have been able to degrade that because in our guts we would not have had the microorganisms that love fiber, plant fiber, because we did not feed those types of microorganisms with the food that we got so they could not survive in our guts. And, and that was really sort of, like, little microbial whispers in my ear saying, “Okay, not all people need to eat the same things.” And some of that has to do with the gut microbiome that our foods sustain.

JVN [00:27:17] So you were saying earlier that you were, like, hunting with your family and, like, mapping out the microbiome of the food. Like, how does one map out the microbiome of the food?

AVIAJA HAUPTMANN [00:27:26] What we usually do when we go hunting is that we cut up the meat in little pieces and let it dry in the sun. So we can store it for, for the rest of the year. So I went around with little sterile cotton swabs and swabbed the meat and swapped the caribou stomach, put it into a little vial with some fluid in it that preserves the microorganisms and their DNA. And then I brought that back to a lab in Denmark, took out all the DNA, did something to it that will enable me to look at it on a computer.

JVN [00:28:00] Interest! Okay, that’s so cool. I've said it a million times, I just, I'm fascinated. I just love everything. So you said that Inuit food is prepared in nature. You told us about, like, the like the undigested, like, vegetable stuff and the caribou stomachs and the birds stomachs then, like, taking that gorgeous fucking liver and, like, chopping it up and put it in, like, that stomach acid. Honey, I’m that is so cool. What other food preservation methods exist in Inuit communities?

AVIAJA HAUPTMANN [00:28:26] So it's very common way to preserve food through drying like we do with a caribou or with fish. And other than the hunting research that we did, I did a study on drying fish. So this little fish called the capelin in Greenlandic, we call it ammassat. It's a very important food here and has been always because it’s a fish that arrives in the springtime and then it arrives in really, really great abundance. And when we then can fish a lot of them and dry them, we're able to sustain ourselves through times that have less food. And then also the cod that we dry the filets off. And I was looking at the microbiome of those foods and that was actually really interesting insight from that to understand, because we have dried capelin that are made industrially, and then we have dried capelin that my family makes and other families make. And we compared the microbiomes of those foods. And what we see is that—and that’s obvious, of course, but it's nice to see it—that when we eat foods that are prepared in nature, we are eating microorganisms from nature, of course, and they have a higher diversity than, for instance, when the industry prepares the exact same types of foods. So for me that is sort of a beginning of the discussion of what happens to us when we only eat industrialized foods, when we don't get that diversity of microorganisms that the environment can provide us with.

JVN [00:29:29] Is that just because, like, when you're doing things on an industrial scale, there's like so much more to process? Why is it that those smaller batch, like, locally sourced stuff has, like, a more diverse microbiome?

AVIAJA HAUPTMANN [00:30:10] It's a really good question. And I think one basic answer is just proximity to soil. Soil is the richest source of microorganisms, and the whole purpose of industrially processing is also to get rid of microorganisms. So you will have stainless steel, sterilized surfaces. That whole process is just farther removed from the natural environment that has a natural, high diversity of microorganisms.

JVN [00:30:38] Yes. Okay, so how is the, like, Inuit ways of preserving food, like, similar or different to, like, other Arctic communities? Like, is there any, like, things that, like, everybody does or, like, anything, like, really cool, like Greenlandic Inuit things that, like, other people, like, don't do.

AVIAJA HAUPTMANN [00:30:57] I think even within Greenland, fermented foods are some of the most localized foods. One of the more fascinating things that I've had the opportunity to work with is this dish called kiviaq, and kiviaq are fermented seabirds that are sewn into a seal skin. And just like with some of the fish that I've mentioned, these seabirds arrive at a certain time around May, and then they're present in very high abundance. And of course, human ingenuity will find a way to preserve that abundance through time so that you don't have to starve when they aren't there. And the way to do that is to take these seabirds that are tiny, tiny, small, and you get about three to five-six hundreds of them, and then you sew them into a seal skin and bury that under a pile of rocks.

JVN [00:31:50] Mmm! And then what?

AVIAJA HAUPTMANN [00:31:52] And then you wait a few months, depending on the weather and the temperature, you go and you smell it, like, the aroma to, to assess whether or not it's done. And once it's done, you eat them like that. You can peel off the skin, the coat, and then you eat the bird.

JVN [00:32:10] And it's just, like, a little, like, fermented little bird?

AVIAJA HAUPTMANN [00:32:12] Yes.

JVN [00:32:13] Interest! What's it called again?

AVIAJA HAUPTMANN [00:32:16] Kiviaq.

JVN [00:32:17] Cool. Okay. Okay. So we just had this, like, amazing episode about Native Hawaiian food systems and about how, like, ice disrupted those food systems in this, like, really interesting way. But obviously, like Greenland, honey, there's, like, ice everywhere because it's, like, the Arctic. So, like, was ice traditionally used the same way that we know

it today, like, for, like, freezing things to, like, keep things longer and, like, would you really even, like, wanna ice drink in Greenland, cause you're like, "Fuck, it's already so goddamn cold," like, how do you use ice in Greenland?

AVIAJA HAUPTMANN [00:32:48] It's such a good question. And yes, obviously that's the thing that we have quite a lot of. So the whole middle part of our country is just one big blob of ice. And yes, the ice was used to preserve food at a time where refrigerators weren't common. But something that I found really interesting in starting to investigate what kind of fermented foods that have been and might still exist some places in Greenland is that people would choose rather to actually dig holes that were so deep that the ice could not get to it and then put the seals down there so that they would ferment rather than just freeze, which is an important understanding that people prefer the tasty sharpness of a fermented seal over a frozen one.

JVN [00:33:41] Interest. I mean, how long does it have to go to get, like, below the permafrost? It's so fucking interesting. Okay, wait. How does ice affect Inuit food systems?

AVIAJA HAUPTMANN [00:33:51] So currently there is a big focus on Greenland because of climate change. And for a long time, the focus was on the melting of the ice sheet and how that impacts the rest of the world. But we are understanding more and more now that it's also impacting us as a peoples locally. And that is especially for the hunters, because some of the hunting is dependent on sea ice. And the sea ice is getting very thin and suddenly some years it's not even forming. So that is a very direct way that ice and the changes that we see in ice formation in these years is impacting hunters. So right now they are having a lot of issues in the very northern part of Greenland because the sea ice has not formed properly this year. So they can't go hunting for seal, which they use to feed the dogs and to feed themselves. So it's, it is really impactful these days.

JVN [00:34:45] Okay, so you grew up in both Greenland and Denmark and you spent time in both places. Can you tell us about the differences in the foods you eat in each place?

AVIAJA HAUPTMANN [00:34:54] My grandmother, she has ten children and all of those children have children. So we are a very large family. We're about 45 cousins from my grandmother. And we would go either fishing for trout and smoking trout all summer or hunting for caribou, drying caribou meat all summer, spending that time together. There are so many elements to that. Being in the environment, living in a tent with families, having to be in close relation with your family and get along even though you are sick of each other and you're missing other foods than the ones that you get. Like, just having an understanding that things take resources and working together can create abundance in food. And there are so many elements that you could go into. Getting an understanding of the weather, learning how to feed yourselves. All of those things come down to going camping for a month with all your cousins cutting up trout, and preparing them to be smoked.

In my family, my mom, she usually cooks Danish foods. We moved back and forth quite a lot between Denmark and Greenland. We've eaten pretty much the same foods here and

there, with the exception that in Greenland we would be eating a lot more fish, local fish, but also a lot of the meat would be caribou and musk ox from our families. And, and today I, I don't remember that as much from when I was a kid, but today my family will occasionally drop by with a big pile of crabs, for instance, or fish. My uncles are fishermen or they will have been hunting and they bring meat. So in that way we do eat a lot more local Greenlandic foods when we are in Greenland.

JVN [00:36:49] So you live in Greenland mostly now?

AVIAJA HAUPTMANN [00:36:53] Yeah, we live in Greenland now.

JVN [00:36:53] And I mean, what's that like living in Greenland? Just generally, like, I mean, because you said you spent some time in California, not to go into a hard right, but like, what's it like? Just like living in Greenland. Like what, what do you think that most of our listeners who don't live in Greenland and probably haven't been there, like, what would we be surprised about? Just kind of, like, walking around there.

AVIAJA HAUPTMANN [00:37:14] It depends a lot where in Greenland you live. So I live in the capital Nuuk, and Nuuk is its own thing. And, and I'm going to be telling you how it is to live in Nuuk, but it's important to say that that's not the same as living anywhere else in Greenland. Nuuk is the biggest city in Greenland. It's about 17,000 inhabitants. And we have most things that you would expect from a capital, like we have a cinema and a public pool and sports facilities and these kinds of things. But other than that, it's often surprising to people that if you live in Nuuk, you are just in Nuuk. You can't take your car and drive off to Sisimiut or to Maniitsoq, or any of the other places in Greenland, because each town is isolated on its own and you can only get to another town either by air or by sea.

JVN [00:38:10] Oh, so there's no driving between cities and all of Greenland?

AVIAJA HAUPTMANN [00:38:15] All of Greenland is like that. Yeah, it's basically living little islands. So what's important when you live in Nuuk, and why if you live in Nuuk and you love it, it's because you use all of the surroundings to the city. You don't just think of Nuuk as where people live. You think of Nuuk as the whole fjord that we are in. On the other side of Nuuk, you have lots of little summer houses that people will go to in the summertime. You think of Nuuk as the ocean, where you go fishing and all of these things that you might not notice the first time you get here. But for people who live here, that's really the experience of Nuuk. It's the city, but also the environment around the city.

JVN [00:39:03] Oh! So one way people think of Indigenous foodways as one that has, like, minimal waste. Have you witnessed an increase in food waste in the Arctic, like, through your career, in your life?

AVIAJA HAUPTMANN [00:39:14] I guess the difference now is that we get so much of our foods from the outside and you need to have wrapping in plastics, and all of these things. You need to have cooling. All of these technicalities. That creates a lot of food waste. And one of the things that I really hope that we can, can do something about and something

that I've observed many times, is that we'll have tropical fruits here, like a papaya. And the papayas do not taste like a papaya from a papaya tree in Zambia, for instance. And I've had an opportunity to have that once, and that was really, really good. But the papaya here just, it does not taste, it doesn't respect what a papaya is. It's at the same time, it's very mushy and moldy. And also it's not ripe and it's quite expensive. It'll probably be around, like, $10-11 and it's thrown out in the end. So that poor papaya traveled so far to come here to the Arctic to be thrown out. And for me, that's just, no pun intended, a really low hanging fruit that maybe we should just not have tropical fruits in the Arctic. You know, It's not there for a reason. Papayas aren't a human right. That would be a place to start. And I, yeah, I hope that we as a food system in Greenland could make a decision maybe not to have tropical fruits here.

JVN [00:40:39] Because there's just, like, literally no way to get it there and have it be, like, fresh and nice.

AVIAJA HAUPTMANN [00:40:44] No.

JVN [00:40:45] Unless you're, like, spending so much money on, like, the gas on, like, a plane or whatever, which is, like, ah! Also sad. I get it.

AVIAJA HAUPTMANN [00:40:51] Yes.

JVN [00:40:53] Okay, so how would you describe the relationship between settler colonialism and waste in the Arctic? I mean, I think you kind of just did, but is there anything else you would add to that?

AVIAJA HAUPTMANN [00:41:02] No, I think it's just, you know, colonialism in Greenland has, for us what it looks like is that we have for so long attempted to be a replica of Denmark in all ways, including our food systems. So that, of course, increases food waste because we have to bring in the foods from the outside.

JVN [00:41:24] Hmm. I guess I just never realized that Denmark had colonized Greenland. Who knew? I'm learning so much today. So in our episode with Norah MacKendrick, we learn that toxins from around the world can be found in the Arctic. Ew! So how is that affecting the ecology and the food chain in the biome?

AVIAJA HAUPTMANN [00:41:43] We are quite close to being able to say something about that. So just yesterday, actually, I finished a draft that answers that exact question. So yes, we know that contaminants are concentrated through our food chain. We eat animals that are quite high in the food chain, like the seal. The seal is a predator, the narwhal is a predator, and we eat predatorial species. And that means that there is a quite high load of certain contaminants. And we've, in a study, we've been looking at how that impacts the gut microbiome. But it seems like at the level of heavy metals, at least—we focused on heavy metals—that we see currently it does not have a great impact on the gut microbiome. We did see one strain of bacteria that's actually in our gut microbiome, well, in some gut microbiomes, that is able to reduce the toxicity of mercury, which is quite nice.

That would be a good friend to have in your gut if you did eat foods that had high contents of, of mercury. But I want to say in this context also that for 30 years there's been a very large focus on contaminants in the Arctic and in our food systems and in our animals. And, and I feel a lot of the researchers that have mapped, for instance, the amount of contaminants in the seals or in the birds, they do not always think about the fact that they are looking at people's foods and people's culture at the same time. So our food system has been framed by the scientific community very much in the context of contaminants, even though the public health issues that we see in Greenland are not from contaminants, they are from french fries and Coca-Cola. And I think it's very important to understand that there are contaminants, but also set that in a context and balance it out, because the public health issues that we have are not due to the contaminants, they're due to imported foods.

JVN [00:43:46] Yeah, like, the Indigenous or, like, the local animal food sources are still, like, great and safe and healthy to eat.

AVIAJA HAUPTMANN [00:43:52] Yes.

JVN [00:43:53] I was a hardcore vegan for, like, four years. I read, like, this book called Skinny Bitch when I was, like, 22. And it was really, like, part of it was, like, to be a skinny bitch. But the other bigger part was, like, it's written by these two, like, hardcore PETA, vegan, like, activists. And it really spoke to me, but it also it led me to read a lot of other books and do a lot of research. And I think, I learned that, like, there is a lot of cruelty, like, we don't really take care of, like, the animals in the U.S. the way that we should and the amount of waste and how much food waste. I mean, I think that there's a lot of issues in the ways that we consume meat in the United States. And at the same time, there are other communities that, like, have to have animal-based diets, like, because of where they are, because of their culture, because Indigenous cultures, because of geography, whatever the reason is. I'm curious about people and cultures who, like, have to have an animal-based diet because of exactly what we're talking about. And I'm also curious about what people who live within those cultures think about when they see people saying such, like, vehement, like, you know, things about, like, animal-based diets.

AVIAJA HAUPTMANN [00:45:01] Mm hmm. Thank you. Yeah. Thank you so much for sharing that with me. That makes a lot of sense. So what I want to say is that one of the things that really drives me in this is that we currently have a global initiative from some very, very powerful entities that are promoting a plant-based diet globally, assuming that all people can eat the same thing. And as I alluded to before with the gut microbiome, it's not so. That there is important value in eating foods that can be sourced locally and that have cultural implications for you. But these very powerful global initiatives, one of them is the EAT-Lancet Commission, does not really take into account these things. So there are some arguments that they bring to the table. One is nutrition, and I can just flat out disagree with the fact that animal-source foods are not nutritious. They are certainly the most nutritious foods that you can get if you eat the right things. So you need to eat from nose to tail because we are nose to tail beings. We are made of liver and fat and skin and eyes and hair. So those would be the things that we need to eat to provide our bodies with

what they need. And then there are other arguments at play and that's the sustainability argument.

And for me it's important to acknowledge that there are definitely big problems with animal agriculture, factory farming, and these kinds of ways of eating animals. What I want to emphasize is that we're talking about animal-sourced foods in a completely different context here. We're talking about animal-sourced foods that come from, actually from, wild animals so that you have to make the effort to get that animal. And that is a very big difference or it's an important point for me that assuming that we all need to eat industrialized food is also really severing the ties between our environment and ourselves. The way that we eat animal-source foods in Greenland is really connecting that tie between our environment and ourselves, really knowing that the steak or the liver or the filet on your plate came from someone, came from a living being, is what we all need to face, if we need to change the way that we behave in this world. We need to understand that when we eat something, when we wear something, when we take something out of this planet, it has consequences somewhere. And if you hunt or if you fish, you see those consequences immediately. And I actually feel that having people, or children and young people, understand hunting and fishing the way that Indigenous peoples do is an important way that we can teach future generations to act differently than our generations and past generations have done, where we just take and take and take from this planet and never give anything back.

JVN [00:48:18] Yes, queen, I'm obsessed. And we've touched on it, but how does global warming shape your work and what are other scientists in Greenland saying? I mean, because the middle of Greenland is, like, just one gigantic, like, glacier or whatever, like, are we worried that it's going to melt and like the edges of Greenland are, like, going to, like, what's happening? Is Greenland going to be okay? What are the scientists saying?

AVIAJA HAUPTMANN [00:48:42] Well, I did mention that you can see climate change impacts on hunting populations or families that hunt here and are dependent on hunting because of the sea ice. But with that said, I don't have a specific climate change angle to my work. And for me it's a little bit because of the dynamics in how we frame the stories we tell about the Arctic and the stories we tell about Indigenous peoples. Like with the contaminant research. A lot of the focus on us as a population and on the Arctic and on Greenland has been deficit-based, meaning that researchers come here to dig up problems that they can solve. And those are the things that will get you funding and that will publish your papers, is that, if you will, we have all the climate change going on here. We have all the contaminants in our food systems. We have all of these social problems because we're a colonized Indigenous population. But that's not all that we are. But for many years, that's all the stories that have been told about us in the scientific literature.

So what is really important to me, other than doing the research that I do, is to emphasize the importance of being more creative with the research that we do. That we approach things with a strength-based approach, like, why are our food systems important? Because they teach us that we need to be respectful of our environment. That's something that people could learn from here. Or, our foods are not just full of contaminants. They're

extremely nutritious. Fermented foods is a good example. A lot of researchers would approach our fermented foods with an interest in showing how potentially dangerous they could be. “They could make you sick.” But people make them. People find them important. I think it's much more important to understand *why* we make them. Why are they important? Before we dig into that tiny corner, that would be, “How could they be potentially dangerous?” And the climate change research area really feeds into this deficit narrative. And of course, if I come across something in my research where it is important, I will not ignore it. I will take it up. Like if I come across anything in my research on fermented foods that points to a potential threat, I will not ignore it, but that's not the angle that I use. And it's not necessarily how people here talk about things, as climate change is this enormous threat, at least not to the communities that aren't dependent on the sea ice.

JVN [00:51:27] Yes, queen. Okay, so this is, like, amazing. Have you ever heard of this show Alone?

AVIAJA HAUPTMANN [00:51:31] Yes. I've not seen it.

JVN [00:51:33] Well, it's fucking amazing. And it's the first time that I ever knew, like, what musk ox, like, was. So when we read it in 2017, you literally, like, walked with, like, a 30 kilograms of a half of a musk ox across, like 15 kilometers. Like, we need to hear more about that because this one guy on Alone killed a musk ox with his bare hands and he totally ate it nose to tail. And then he took its brains and he mashed up its brains and the musk ox’s scrotum. After eating the balls raw, he just ate the balls. Just, just plop, plop at the testicles. And then he took the brain and he put it in the scrotum and he mashed up into a paste, and then he used it as like a lip fucking balm and, like, a hand chapped cream and like a body lotion. Honey, he was formidable. Like, he was really good on that season. I prefer this other girl on that season named Kali, and we should probably get Kali on Getting Curious because she's fucking epic. So can you please tell us about this experience and as an Inuit woman, like what it meant to you to get to do that and to be a part of that journey?

AVIAJA HAUPTMANN [00:52:37] Yeah. Thank you for that question. It did mean a lot to me. I had just lived 21 years of my life in Denmark and had finally finished all of my studies, finished my Ph.D, everything. Had convinced my partner that we should move to Greenland, bring our son. And the first thing that happened was that I had a chance to go hunting with my family like they've done for so, so many years. So my uncle brought me on to one of the hunting walks. They will usually go like every other day or so, so they can rest their legs and their backs every other day. And I was really excited to go. This is an area called Angujaartorfik and my family has quite strict ideas about where the caribou and the musk ox that taste the best needs to be shot. So that's why we're walking all of those kilometers, like seven or eight kilometers up into the mountains, from where we could see the ice sheet. And that's where you have to shoot the caribou and the musk ox. And we shot one caribou and one musk ox. And it was really, there is, there's so many things to it. Just the honor of being brought and being taught these things, but also seeing those animals die is, is an important part of it because it's not, it's not pleasant, it's not fun, it's

not nice in any way. And accepting that and letting that be part of the experience is so important to growing and understanding of responsibility towards our environment.

And then carrying that thing. So, you—we were four, my cousin, my uncle and my cousin's partner. So we could each carry half an animal. And you have sort of, the thighs are around your ears here, and then you hold the legs and you have the half of the body, like, over your head. It was the most intense thing I had ever done. I think it had been a few months since I defended my Ph.D., and the feeling that I had when we got into camp after walking with that thing, like, 30 kilos for, fo, seven, eight kilometers back was greater than defending my Ph.D. I felt more honored and accomplished at that moment, and I was crying and sweating and probably bleeding somewhere, also, it was so intense. But it, it really gives you such a respect for animals and for the environment. And where my family comes from is a small settlement called Kangaamiut. And I once heard that children from Kangaamiut were always asked to carry the whole animal, the first animal they shot in Angujaartorfik. They had to carry them back to camp themselves. And part of that, of course, is to teach young people that we shouldn't take more than we can carry or take more than we need. So for me, having been so many years in Denmark, in the Danish educational system, that was really abrupt and much needed return to, to what it is to be Inuk.

JVN [00:56:08] Wow. Thank you for sharing that with us. Your work is extensive. It's amazing. What do you hope listeners take away from your work and what is your dream for Inuit foods in the future?

AVIAJA HAUPTMANN [00:56:22] From the microbiological work that we do. I really hope that we'll get an understanding of how important it is for us to have the natural environment, to take good care of the natural environment, to prepare foods in the natural environment, to have a respect for microorganisms and animals in our surroundings. That's one part of it. And my hopes for for the future of food in Greenland is really that we cherish the privileges that we have to have a connection to a food culture like our own, that we cherish that our children can know the foods that are on their plates, that they can have a relationship to those animals and and that they can learn how to feed themselves and that we expand that a little bit from what we have today to also embrace all of the spiritual teachings that come from making your own food, which today aren't prevalent among all families. At least that's something that we, we can really work on, I think, really understanding what our foods are beyond just something that makes us full.

JVN [00:57:36] Mmm. If there's someone who's been particularly moved from that and listening to this, how can people incorporate some of that spirituality into their own lives? Is it about eating more locally. Is it about, like, applying those same things to, like, your relationship with, like, your grocery store, like, not taking more than what you need, like trying to not, you know, like, use everything that you have. Like maybe get, like, interested in, like, different cuts of meat, even? Like, what do you think?

AVIAJA HAUPTMANN [00:58:05] Yeah, for me, it comes down to having a relationship to what you eat and understanding and respecting whatever that is, whether it be a cheese or

a fish or a broccoli, understanding that that's a living being that came from somewhere and someone brought it there. Hopefully, if you can bring it there yourself, I think it will be much easier to understand what lies in it. But a lot of these things can't really be explained so much with words. You have to carry a musk ox seven kilometers to be able to understand it, really, like you have to feel it on your body. So doing garden work, I think, is really impactful in for us to understand some of the more spiritual aspects of foods or going hunting and fishing for us.

JVN [00:59:04] It's beautiful. Thank you so much, Aviaja, for your time and for your work and for sharing everything that you share with us. It's just been amazing having on Getting Curious. Thank you so much for coming on.

AVIAJA HAUPTMANN [00:59:12] Thank you so, so much for inviting me. It's such an honor to have been here. And thank you for sharing your braveness and curiosity to, to shine a light on someone like me that I really appreciate it. Thank you.

JVN [00:59:31] You've been listening to Getting Curious with me, Jonathan Van Ness. My guest this week was Aviaja Lyberth Hauptmann. You'll find links to her work in the episode description of whatever you're listening to the show on. Our theme music is "Freak" by Quiñ - thanks to her for letting us use it. If you enjoyed our show, please introduce a friend and show them how to subscribe. Follow us on Instagram & Twitter @CuriousWithJVN. Our editor is Andrew Carson. Getting Curious is produced by me, Erica Getto, and Zahra Crim.