



What's on Your Plate Impacts the Planet with Chris Vogliano, PhD, RDN (ep – 37)

[00:00:00] **Chris Vogliano:** The latest stat is I think 90 percent of Americans are not getting enough fruits and vegetables. It's really high. The CDC said only 1 in 10 Americans are getting enough fruits and vegetables, so we have a lot of room to improve.

[00:00:13] **Ginger Hultin:** Welcome to the Good Clean Nutrition podcast. I'm your host, Ginger Hultin.

[00:00:17] I'm an integrative registered dietitian nutritionist, and today I'm talking with my friend and colleague, Chris Vogliano. Chris is a PhD dietitian and a technical advisor of food systems within the United States Agency for International Development. Chris has worked to promote equity and sustainability across the food system, including designing policies and programs both nationally and internationally.

[00:00:38] I'm looking forward to learning more about his work and the impact of sustainable food choices on health and the environment. We're going to dig into dietary diversity, the role of beans and legumes, and the connection between individual food choices and global sustainability efforts. I've worked with Chris for many years in several different capacities and I'm really excited for you to get to meet him today too.

[00:00:59] But first, I was at an airport recently in Portland, Oregon. It's Deschutes Brewery, if you have heard of it there. I highly suggest it. And I was grabbing a preflight breakfast burger. But I don't eat meat, so I ordered like a faux burger, like a beyond burger. And it's funny because the people next to me noticed that.

[00:01:19] And then I overheard them asking the server afterwards, like, are those burgers good? Like, what's in them? What are they? Are they safe? They actually asked the server if the burger was safe. And I just thought it was so interesting because it really highlighted something that I hear from my clients and reporters all the time.

[00:01:38] You know, is this safe? What is it? Can I trust it? Most of these faux burgers are made from soy or pea protein. And so really they just are mimicking regular burgers. They're rich in protein. They're rich in saturated fat. They're rich in sodium, so much so that they actually kind of mimic the nutritional quality of regular burgers.

[00:02:00] Just like with regular meat burgers, I don't suggest that my clients eat them every day, and I don't suggest that you eat faux meat every day either. I like to enjoy those burgers

from time to time, and it's so fun for me as a person that doesn't eat meat. to have the option of having something that kind of tastes like it and, and mimics it, but still matches my values because of course there's benefits, right?

[00:02:21] With these fake burgers, because there's animal welfare benefits and there are environmental benefits. And we're going to talk with Chris about that today. Chris, you have a very global perspective on food. And I understand that comes from your PhD work in New Zealand.

[00:02:38] **Chris Vogliano:** I actually wanted to understand how food systems work in different countries.

[00:02:42] So, from there I was able to start working with Indigenous peoples in Solomon Islands, which is an archipelago of around 900 islands just north of Australia, to understand how climate change And how the westernization of diets, what we call the nutrition transition was impacting the quality of folks living in those villages within Solomon Island.

[00:03:05] So, that really opened my eyes to kind of the global sector of food systems and how, um, the challenges and opportunities are very different in low, middle, and high income economies.

[00:03:18] **Ginger Hultin:** Oh, that's so interesting. And I remember you went there and lived there with them, right?

[00:03:23] **Chris Vogliano:** Correct. Yeah. No cell service, no electricity.

[00:03:26] Like, it was like two plane rides and an open boat ride across the open ocean for 90 minutes just to get to these villages. And I mean, When I say remote, I mean remote. So it was a once in a lifetime experience and I'm super grateful because such generous and kind people willing to let me in as an outsider to really understand and observe and then also advocate for more traditional diet patterns within their policy space.

[00:03:52] So I actually was able to work with indigenous dieticians there to help Build food based dietary guidelines for Solomon Islands. So my research did help inform national policy as well.

[00:04:03] **Ginger Hultin:** Not a lot of people connect the dots between the way we eat and how it affects the planet. We often think about it in terms of emissions and pollution, but how does that relate to food?

[00:04:14] **Chris Vogliano:** When we do think about climate change, we think of auto emissions and industry, but Our food production is a massive contributor to greenhouse gas emissions, to land use change, to water use, to biodiversity loss, all which aggravate climatic changes. I think the latest stat is around 28 to 32 percent of all global greenhouse gas emissions come from the agriculture sector, how we produce our food and what types of foods we produce.

[00:04:42] On the flip side of that, climate change is also challenging the methods of production we are using to produce our food today. So it goes both ways. Food production is contributing significantly to climate change, and in turn climate change is impacting how easy it is to produce the food.

[00:05:03] **Ginger Hultin:** I can see how you have to take a global perspective because there's so many systems involved.

[00:05:08] And you mentioned a term that I'd love to hear a definition of, which is biodiversity. Could you talk a little bit more just about what that is and how you use the term?

[00:05:17] **Chris Vogliano:** Yeah, so biodiversity, um, when I work in the space has two levels. One is global biodiversity, meaning all plants, animals, fungi, and the intersectionality and connectedness between those species.

[00:05:32] That interconnectedness is kind of, you know, that the sum is greater than the individual parts. And that is very true with the ecosystems that we all reside in. There's a term called ecosystem services, and that is basically a term that means, um, how our water, how our air is being cleaned by this natural biodiversity.

[00:05:53] They break down different inputs and then turn them into soil amendments or healthy air, healthy water, clean air. And so the less, Global biodiversity we have, which it has been dramatically declining over the past five decades. The harder it is for this, these ecosystem services to operate like they have been for hundreds of thousands, if not millions of years.

[00:06:15] And then the other side of biodiversity is our agro biodiversity, which basically just means the agricultural biodiversity within our food system. And that also has been declining in tandem. There are around 250, 000 plant species on the planet, and right now, uh, we are consuming only around 200 of those.

[00:06:39] But if you zoom in even farther, three crops, uh, make up around 60 percent of our global calories. Rice, wheat, and corn. corn and wheat. And so that is not a really smart choice from a climate nutrition or even cultural lens. There's a real opportunity to diversify our food system.

[00:06:58] **Ginger Hultin:** And that makes me think about population growth globally and how there's going to be a lot of people both right now that need more access to food, but also in the future, we're going to have a big need.

[00:07:10] What does equitable access to nutritious food look like? Is it improving? Is it worsening?

[00:07:15] **Chris Vogliano:** Before the pandemic, we were actually seeing malnutrition drop year to year, which was really amazing, uh, public health success. But since the pandemic and because of climate change, malnutrition is actually starting to creep back up.

[00:07:30] Um, that malnutrition, meaning not having access to enough food to meet your daily needs and to prevent chronic disease from happening. So there's a real need for healthier, more resilient, climate resilient food systems that produce food, um, for people to be, to live their healthiest lives.

[00:07:52] **Ginger Hultin:** And when you talk about malnutrition, are you talking about globally or in the U.

[00:07:55] S.? Is it both?

[00:07:57] **Chris Vogliano:** Both, right? Yeah. So malnutrition presents itself differently in different contexts, but there are certain micronutrients, for instance, that many people are not getting enough of. In low income countries, it tends to be more zinc, iron, vitamin A. But in higher income countries, it really depends on the context, but we're seeing iodine or calcium or vitamin D.

[00:08:22] Um, some iron and you could probably speak more to this ginger because you work in the clinical space, but there are nutrients because of the lack of diversity within our food system and the ultra-processing of our certain foods. Those nutrients are stripped out and we're getting less and less of them.

[00:08:39] I also want to mention briefly that because of climate change and because we're putting more carbon into the atmosphere, our staple crops like corn, rice, and wheat are actually modeled to be reduced in CO2. The amount of essential nutrients they contain. Um, and actually the increased carbon in the atmosphere makes them grow faster.

[00:09:02] And because they're growing faster, they're not actually able to absorb as many nutrients from the soil as previously. So ultimately, our food is becoming less nutritious due to climate change.

[00:09:14] **Ginger Hultin:** That is fascinating because what you usually hear is the soil is the problem. And it sounds like that kind of is true, but I'm also hearing it's the speed at which things are growing and the carbon in the atmosphere.

[00:09:28] **Chris Vogliano:** All of the above. Yep. It's multifactorial.

[00:09:30] **Ginger Hultin:** So often we hear about the problems and I'm glad to hear you put some percentages to it and highlight it, but I know that we also want to talk today about what to do about it and how people can take charge. Is there anyone like a company, industry, a policy doing it right?

[00:09:49] **Chris Vogliano:** My, my initial thought is legumes. I know that you're also a big fan of legumes, but legumes meaning peas, lentils, beans. Producing those foods, um, especially a wider variety of beans and lentils and pulses is incredibly beneficial to soil health and to our environmental well being. Legumes are nitrogen fixers, meaning that they actually extract nitrogen from the air, um, put it in the soil and nitrogen is a natural fertilizer.

[00:10:22] So if you're planting legumes next to other crops, the legumes can actually help fertilize those other crops without actually needing to add an amendment of a synthetic fertilizer. So they're, um, environmental heroes, but then they're also nutrition powerhouses. Legumes are incredibly high in protein, high in iron, high in many essential nutrients, including fiber, that many of us are not getting enough of.

[00:10:49] So, um, there's a real opportunity for the legume industry to expand farther than where it is. If we're not eating enough, we're way below the recommended, um, intakes of legumes. So there's an opportunity there.

[00:11:01] **Ginger Hultin:** I mean, beans are really, really important. Beans and legumes. I think they're kind of this unsexy, unexciting food, but that's unfair because they're so good for the climate is what I'm hearing from you.

[00:11:13] But I recommend them all the time because they're a great source of fiber for gut health. They're a really easy to make, they're affordable, and they're a great source of protein too.

[00:11:23] **Chris Vogliano:** Exactly. And there is not one country in the world that doesn't have a native legume species. Legumes are one of the foods that can be found in every part of the world, which is really cool.

[00:11:34] So there's a real opportunity to apply that cultural lens too and ensure that the beings that we're promoting and producing represent the cultural values of those living in that area.

[00:11:45] **Ginger Hultin:** I am a little obsessed with the blue zones, which are the pockets around the world where you have a large number of people living to be a hundred or older.

[00:11:55] Beans are the one thing that exists in every single one of the cultures. There's not a lot of other similarities, but beans over and over seem to be something that could be linked to health and longevity.

[00:12:07] **Chris Vogliano:** Yes, yeah, true. Beans are a common denominator across blue zones.

[00:12:12] **Ginger Hultin:** So what about food waste? Is that a uniquely consumer issue to confront, or is it more for bigger entities like restaurants, farms, companies to, to combat?

[00:12:22] **Chris Vogliano:** This is a passion of mine. I feel like it's one of the dumbest problems we have, but it is a very significant one that needs much more attention than it's currently getting. So there are two, there's food loss and food waste. Food loss happens at the beginning of the food supply chain, meaning from when it's harvested all the way until it reaches the retail sector, the restaurant, the consumer, food loss happens primarily in low and middle income countries due to a lack of a solid transportation system, cold storage facilities, etc.

[00:12:58] But in low and middle income economies, by the time it gets to consumers, there's very little food waste. That's not true in places like the United States or in high income economies. Our food loss is minimal. Most of what happens in higher income settings is food waste. And in the United States, we waste anywhere from 30 to 40 percent of all of our food.

[00:13:22] It's so it's it's an insane amount. I think the stat is around 130 billion pounds, which costs around 161 billion dollars worth of food annually. So food waste represents the largest category of materials and landfills, or around 22 percent of everything that enters our landfill. So it is a massive component of what we're throwing away.

[00:13:45] As we talked about already, Ginger, the food production takes a lot of resources, right? A lot of land, water, energy. Um, and emits a lot of greenhouse gas emissions, but when we waste the food, it's almost insult to injury because when it enters the landfill, it produces methane, which is a potent greenhouse gas that's around 28 times more potent than carbon dioxide.

[00:14:06] So, while it's sitting in the landfill, it's actually actively also contributing to climate change.

[00:14:11] **Ginger Hultin:** I find that my clients care a lot about this. I hear people saying they want to be more thoughtful about meal planning and prepping and how much they buy. I'm forever talking about using canned or frozen food, which can be really healthy because they can be more shelf stable or frozen stable, if you will.

[00:14:28] **Chris Vogliano:** I love hearing that. Yeah. And honestly, even if environment is not your motivator. Economics can be right. If you're throwing away food, you're throwing away money. Right. So, there's a cost savings too to reducing food waste. And I just, I love that you mentioned canned foods. I think this is an important plug.

[00:14:44] Canned foods. frozen foods. They're incredibly nutritious, especially just like raw frozen veggies or canned beans. Like you said, they're shelf stable. If I could show you my pantry right now, you would see that it's filled with a wide variety of beans, lentils, etc. And then my freezer is full of frozen vegetables and fruits because they're shelf stable, they're very nutrient dense, and I don't have to worry about them going bad.

[00:15:07] **Ginger Hultin:** Right. Yesterday, one of my clients was saying, Oh, I know I should make my beans from scratch, but I don't really know how, and I don't have the time. And I said, me neither. I don't know if I've ever done that. Like, I love opening a can, rinsing them off, and it just is easy, affordable, and really fast, and a great source of nutrition.

[00:15:24] **Chris Vogliano:** Exactly. Right. I can't tell you the last time I've used dried beans. I always opt for can.

[00:15:30] **Ginger Hultin:** I'm so glad we're on the same page about that. What do I tell my clients who are worried about where the packaging came from or recycling the can or the greenhouse gas emissions of shipping it from wherever it came from?

[00:15:46] How do we tackle that conversation?

[00:15:47] **Chris Vogliano:** Yeah, that's an excellent, excellent question. And there's some nuance here to discuss. So the processing, transportation, and packaging of food actually contributes to a relatively small amount of greenhouse gas emissions from food production. The vast majority of greenhouse gas emissions from food production come from the actual foods themselves, and not the transportation or the or the actual packaging.

[00:16:13] In terms of canned food. products. That can can be recycled, right? Most folks have access to a municipal recycling program and that can can be recycled and used again in the future. So truly, I do think that canned food is one of the more sustainable options.

[00:16:29] **Ginger Hultin:** So during the pandemic, people bought pallets and pallets of canned foods, beans, tomatoes.

[00:16:35] lots of dry goods, but they all have expiration dates. And so my question to you is, do we need to throw out things that are expired? What do they mean? How does that contribute to food waste?

[00:16:47] **Chris Vogliano:** If you actually look at any of your food items, none of them actually say expiration date on them. They all say sell by, best by, best if used by, and those are actually indicators of quality, not safety.

[00:17:02] The only food that's legally Allowed and supposed to have an expiration date actually is baby food and baby formula. The reason why that nuance is important is because the food is not necessarily unsafe to eat after that date. It just means that the quality might suffer slightly, the texture, the taste, um, something and, and.

[00:17:20] The industry doesn't want to be responsible for that decline in quality. So, um, all of that to say, uh, it depends on the type of food we're talking about. Canned foods have been found 50 years past their best by date and still safe to eat. Um, because they're hermetically sealed and nothing can get in. Um, frozen foods last probably, you know, six months.

[00:17:41] Past the best by date. There is an incredible website called www.stilltasty.com and you can type in almost any food and it will give you the actual, um, best by use by sell by date of any, any food, whether it's frozen, fresh, canned, et cetera.

[00:17:59] **Ginger Hultin:** I'm going to put that link in the show notes because it's a really, really valuable resource.

[00:18:08] Orgain has an ongoing commitment to planetary health. This includes sourcing high quality planet friendly ingredients whenever possible, with many products being USDA certified organic. Orgain is B Corp certified. Certified B corporations meet the highest standards of positive impact on society and the environment.

[00:18:26] This reflects Orgain's ongoing efforts to be a force for good in the world when providing clean, accessible nutrition for all. To learn more about Orgain's ongoing efforts to expand access to clean nutrition and implement sustainable practices, visit [Orgain.com](https://www.orgain.com).

Chris, in my house, I focus on a few things that I am proud of, but I want to know.

[00:18:48] I want to know from you how important they are. Recycling, reducing water use, reducing food waste, and then also composting. Is that worth it? What should people be focusing on?

[00:19:01] **Chris Vogliano:** Yeah, if we're looking at kind of an order of hierarchy, I think that food waste is at the very top because of how many resources, how much water, how much energy goes into producing that food.

[00:19:14] The recycling at home and, you know, the water use at home is almost negligible compared to that. So food production has a huge footprint. That said, recycling is important, um, Particularly, uh, you know, aluminum and glass, as well as producing water, especially if you live in an area that is water scarce. So if you're in California, if you're in Colorado, you have to be more careful about how much water you're using.

[00:19:38] Here in Cleveland, I probably, it can be slightly more liberal because we have 21 percent of the world's fresh water in my backyard, so.

[00:19:44] **Ginger Hultin:** Lucky. One of the big takeaways for me from this conversation is food waste, even on the individual level, should be of the highest priority.

[00:19:54] **Chris Vogliano:** Absolutely, yeah. Compared to other things we do in our lives, food waste has an outsized impact on our personal environmental footprint.

[00:20:03] And when I say environmental, I'm talking greenhouse gas emissions, I'm talking water use, I'm talking land use change, which means converting forests into crops. So there are a myriad of ways that reducing food waste can actually improve the quality of our planet's health.

[00:20:19] **Ginger Hultin:** I didn't quite realize the far-reaching effects.

[00:20:21] I mean, when I think about food waste, I think about it, you know, uh, like you said, the financial aspects of buying it and purchasing it and then throwing it away. You have this guilt, but honestly, it's so much more far reaching than that.

[00:20:33] **Chris Vogliano:** I think a good take home statistic, for instance, is if you were to have a pound of beef, it takes approximately 1, 800 gallons of water to produce that one pound of beef.

[00:20:43] And so if you waste, you know, even a third of that, um, you're wasting hundreds of gallons of water. Um, similarly to eggs or other animal-based foods, it's quite a high water footprint.

[00:20:55] **Ginger Hultin:** I've heard you speak about producing beans and legumes before, and I know this is one reason you are an advocate for plant-based foods. Truly takes less resources to produce a pound of beans. Is that true?

[00:21:07] **Chris Vogliano:** It's, it's like night and day, Ginger. So if we're looking at the stats, like greenhouse gas emissions per 100 grams of protein, pulses are 1/50th of the amount of greenhouse gas emissions of beef. And so, so that just, that's per 100 grams of protein, so that's comparing apples to apples with the quantity of protein.

[00:21:29] And when we look at land use change, for instance, that's a similar story. Um, the, uh, beef and lamb take up a, a massive amount of land to produce, whereas, um, legumes take up a very negligible amount of land to produce 100 grams of protein.

[00:21:46] **Ginger Hultin:** In the past, a lot of people that come to me to work on plant based diets are doing it for health reasons, that is proven, doing it for animal rights reasons, doing it for, I don't know, just, just because their doctor told them, or, you know, maybe even it's trendy, but right now I'm seeing people really more interested in it for climate reasons, and I even did an interview the other day about the climatarian diet, like you're hearing these terms.

[00:22:12] **Chris Vogliano:** Yeah, I love that. I think the younger generation in particular, from my experience, is starting to understand that the impacts that are the older generation and maybe their parents have in the environment, they're inheriting, and they realize the challenges that are ahead of them and understand that food and food choices can make a major difference.

[00:22:32] Like, if you're eating, you know, healthy, a wide variety of food groups, mostly plant based, you're going to be eating more sustainable as well. So there's a strong connection and correlation there.

[00:22:44] **Ginger Hultin:** I like that it's not overly complex. The guidelines are sound. They help a lot of different parts of what we want to focus on.

[00:22:52] **Chris Vogliano:** If we look at our, the average American diet or standard American diet, we see that it is just not very diverse. We're eating way too much meat. Uh, and way too much ultra processed food and not enough vegetables, whole grains, legumes, and fruits. And so there's a real opportunity to just really, um, make sure that our plates, our meal patterns, include as many diverse, minimally processed food groups as possible.

[00:23:18] Um, not to say that I don't enjoy a bag of chips occasionally, like, you know, all foods can fit. I truly believe that, but the more we can get and the closer we can get to minimally processed, diverse, plant based foods, the healthier our diet can be and the healthier it is for the planet. I try not to overthink it too much.

[00:23:35] I think in terms of like food groups rather than food groups. Um, actual like quantities of individual foods as much like I, I, I, when I look at my plate, if I can see so many colors, so many different species of foods on my plate, I know that I'm getting um, sound nutrition. So that's kind of my indicator of a healthy plate.

[00:23:54] **Ginger Hultin:** I'm thinking about the statistics of the recent research in the U. S. A lot of people are not getting enough fruits and veggies, and that's a really easy place to start. And I love the term, eat the rainbow, just thinking about the different colors you're eating. And I agree, we don't need to be formulaic about it.

[00:24:09] It's like, let's look at generally what you do day in and day out, the different colors, the variety, and also focusing on foods that you enjoy.

[00:24:18] **Chris Vogliano:** Absolutely. I think the latest stat is, I think 90 percent of Americans are not getting enough fruits and vegetables. It's really high. Um, yeah, the CDC said only one in 10 Americans are getting enough fruits and vegetables. So we have a lot of room to improve.

[00:24:33] **Ginger Hultin:** Yeah, that's actually lower than I thought. And so that is probably the number one thing I'd work with my clients on. It might sound Cliche for a dietitian to be like, eat more fruits and vegetables. But honestly, it's really, really important. And I like to get into the nitty gritty details.

[00:24:46] I had a client yesterday say, oh, I know I should be eating only greens, but I really love mushrooms and bell peppers and asparagus. And I was like, please eat all of those things because you get different nutrients and benefits from different colors.

[00:24:59] **Chris Vogliano:** Absolutely. And the synergistic effects of food too is something that we're just starting to understand.

[00:25:04] Nutrition for so long has been really reductionistic around vitamins and minerals and even protein. And food is so much more complex than that. And there's research initiatives that are starting now. Um, one in particular called the periodic table of foods initiative. That's looking at the quote unquote dark matter in our food, the phytonutrients, the omics in our foods.

[00:25:25] So there are many, many layers. of our foods that we don't even really fully understand yet, but we do know that plant-based foods and whole foods have an incredible density of nutrients that do protect our body from disease. So

[00:25:39] **Ginger Hultin:** one theme that comes up with a lot of the guests on my podcast is that a lot of people are trying to oversimplify nutrition and it just can't be that way.

[00:25:49] So whether we're talking about what you're mentioning, the complexity of an individual food or how it relates to the complexity of food and systems and climate change, it's hard to oversimplify it. It's very complex. It's ever changing and more research is constantly coming out.

[00:26:04] **Chris Vogliano:** Yeah, I fully agree. I saw an article the other day talking about how a bowl of cereal that has been fortified with micronutrients is healthier than a fruit smoothie with a bunch of vegetables and fruits in it.

[00:26:17] And I'm just like, if you're, if you're just looking at the nutrient content of a specific vitamins and minerals, that might be true. But we know that fruits and vegetables contain fiber, contain phytonutrients and all these other amazing compounds that protect us from disease and promote health. Whereas, you know, an ultra-processed fruit, grain based food sprayed with multivitamins does not have that same effect.

[00:26:40] So, um, I think like to your point, this reductionistic approach to nutrition is actually harming us more than helping us in certain aspects.

[00:26:49] **Ginger Hultin:** I'm sure glad that there's people like you out there doing this work because we really, really need it. We need it. I do want to hear more about your work with Food and Planet.

[00:26:57] Because that's really important. And you also did a survey about dieticians beliefs about sustainable food systems. What were the results and what did you learn from that?

[00:27:07] **Chris Vogliano:** Yeah, happy, happy to put my food and plant hat on. So, Food and Planet is a 501c3 nonprofit started by myself and three other registered dietitians.

[00:27:16] And we really saw a need to provide unbiased and free from industry bias evidence based information to health professionals. We did our first inaugural, um, Sustainability and Food Insights Dietitian Survey in 2023, and we're about to launch the next one here, um, in one month, and we'll be doing it every year.

[00:27:38] But it's very clear. That dieticians want to be involved in advocating for sustainable food systems over nine and ten said that they wanted to be however 98 percent of dieticians that responded reported that they had barriers To advancing sustainable food systems meaning that they had a lack of knowledge or tools or resources So there's a real opportunity to Um, advance the education and the formal sustainability education, as well as the holistic approach to understanding food systems within the dietetic sector to advance sustainable food systems.

[00:28:15] **Ginger Hultin:** I don't know if you can make this reach, but do you think that is probably all healthcare providers?

[00:28:21] **Chris Vogliano:** Yes, I would say so. I mean, the average doctor gets how many hours of nutrition training? It's very small. So, the fact that nutritionists and dietitians that have an undergrad and sometimes even a master's degree aren't understanding how to advocate for sustainable food systems, my guess is that doctors, nurses also don't.

[00:28:44] Unless they, you know, have, um, training on, on the side that they, you know, self select. I don't think that they're knowledgeable in this either.

[00:28:53] **Ginger Hultin:** Yeah. Yeah. I hear that. How does Food Planet advocate for sustainable food systems?

[00:28:58] **Chris Vogliano:** When we think of sustainable food systems, the first thing that comes to mind oftentimes is like planetary or environmental health, which is very, very true and a critical component of sustainable food systems.

[00:29:10] At Food and Planet, we wanted to create a framework that honors all of the dimensions of a truly sustainable food system. So we came up with what we call the 4D framework, or four dimensions framework, which includes planetary health as one of the dimensions, but it also includes nutrition, Um, economic and the most often forgot to mention, which is sociocultural.

[00:29:34] To be, to have a food system that is truly sustainable, it needs to honor all four of those dimensions. And so at Food and Planet, everything we do, every resource we create, every curriculum we develop, every toolkit, cookbook, we run our work through this 4D framework to make sure that we're not forgetting anything.

[00:29:53] Um, and it has proved to be a very valuable framework, not only in our work, but um, other organizations have actually started picking up our 4D framework and running their work through it as well.

[00:30:03] **Ginger Hultin:** It really speaks to the complexity and how we can't oversimplify. Can you tell me more about the socio-cultural connection?

[00:30:11] **Chris Vogliano:** The sociocultural dimension of sustainable food systems respects the welfare and rights of individuals, uh, cultures, and animals. So, for instance, anything from animal welfare standards to culturally appropriate food choices, health equity, food justice, food sovereignty, all of those fit under the kind of dimension of sociocultural sustainability.

[00:30:36] As a registered dietitian, I was not taught in my like formal training to adapt my recommendations to meet different cultures. Um, as you know, Ginger, the vast majority of dietitians are white and female. And so our education is kind of biased towards people that look like us. That's changing, but there is a real opportunity for education and curricula to integrate that cultural lens.

[00:31:06] And so a good example of that is when I was, when I was the nutrition manager at the Greater Cleveland Food Bank, we were purchasing kale and distributing it into low income, predominantly black communities in, in Cleveland. And the kale was just kind of sitting there and frankly rotting. Nobody really wanted it.

[00:31:24] Even if it was free, they weren't taking it. Um, and it wasn't until I started to talk to people and realized, wait, not everyone eats kale. Like, you know, they preferred collard greens. And so we swapped that kale for collard greens and we could not keep Colored greens on the shelves. They were going so fast.

[00:31:40] And so it really just goes to show how ignorant I was and how ignorant, uh, you know, our organization was at that time and how there's a real opportunity to base our, our recommendations in science, but adapt them to cultures.

[00:31:53] **Ginger Hultin:** I hope that. The education for dietitians, and also all healthcare providers, continues to change to be more culturally inclusive.

[00:32:01] It's something that I have adapted. In my practice, I have questions about religious or cultural food preferences, and I proudly work with people on all sorts of different diets, or, you know, fasting for different reasons, or having different food preferences or restrictions, and it's really important to my work.

[00:32:21] As a clinical dietitian, I work with people one on one. How does Food Planet connect to the work I do with my individual clients?

[00:32:30] **Chris Vogliano:** Yeah, so we at Food Planet, really, our model is to train the trainers or empower the nutrition professionals to advance their practice. And so we, um, in 2021 created a master class of four modules that are open source and free on our website that pertain to each of the four dimensions.

[00:32:50] And that master class was taken by over 12 percent of all dietitians in the U. S. or around 10, 000 dietitians, which is really exciting to see that there's that much interest. Um, Another example is we are working quite a bit in the aquatic foods or blue food space. There's quite a bit of interest to scale up what we're calling regenerative aquatic foods, and those are mostly seaweeds or sea vegetables or bivalves, meaning clams, oysters, mussels, scallops, because those species of foods are incredibly nutrient dense but also really, beneficial for the environment to produce.

[00:33:27] And so our organization looked at all the evidence, did some quantitative and qualitative surveys with dietitians to understand kind of the nuances of how we show up in this space. And from that, we created a comprehensive nutrition professional toolkit to promote sea vegetables and bivalves. We also created a cookbook, um, featuring recipes from 20 different diverse, socioculturally diverse dietitians.

[00:33:55] We're creating a curriculum with Johns Hopkins University to integrate aquatic foods training into the training of future dietitians. So we are doing a lot of work to create resources that are open to access global public good that are evidence based and freely available for dietitians to use.

[00:34:13] **Ginger Hultin:** One thing you mentioned previously is that you're, you're joyfully non industry funded or associated.

[00:34:22] You really work on your own. And I'm just wondering, is that common? Or what are you seeing out there with challenges with industry funding and this conversation about climate and sustainability?

[00:34:33] **Chris Vogliano:** We get most of our funding from foundations, family foundations, and other grant opportunities. We intentionally, not that we're against working with food industry, but we see that the dietitians in the public view that as a conflict of interest or could possibly view that as a conflict of interest.

[00:34:53] In today's world, that is happening all the time, Ginger. I go to dietetic conferences and see a speaker up there sponsored by the Beef Council, sponsored by the Grain Council, sponsored by the sugar industry, the alcohol board. They know that delivering messaging through trusted nutrition professionals works, so they're investing quite a bit of money into that.

[00:35:13] But I truly feel, and we at Food and Planet feel, that we need to be providing a more nuanced conversation to these complex topics such as climate change, such as diversity of diets, such as plant-based diets. It's much more nuanced than industry likes to present. They, they truly like to like make it seem like black or white, yes or no, and it, it, it often is more complex than that.

[00:35:36] **Ginger Hultin:** I really love that about the work that you and your group do. So, to bring it back to the individual, what does planetary health mean to individual health? Because we care about the environment and the planet and, and climate change, but we also want to be healthy on an individual level.

[00:35:53] **Chris Vogliano:** The health of our planet and the health of individuals is intimately interconnected.

[00:35:58] If we have a healthy, thriving, Ecosystem and ecosystem services. It is more likely that humans will also flourish. You can see this across indigenous peoples in their kind of philosophies and beliefs around the world. As I mentioned, I did my PhD in New Zealand and the Maori, indigenous Maori culture there is very highly integrated into, you know, everyday culture.

[00:36:21] You see it and hear it throughout meetings and just, you know, in the news and whatnot. So their kind of ethos is, um, actually even translate into public health recommendations. So if you look at the New Zealand National Food Based Dietary Guidelines, which is kind of the equivalent of our dietary guidelines for Americans, there's actually entire sections on how Indigenous beliefs and cultures integrate into health.

[00:36:46] And much of that is around taking care of the planet and how In doing so, the planet takes care of us.

[00:36:52] **Ginger Hultin:** There's so much more to explore about the connection between planetary health and individual health. Let's talk more about that in the next episode where we cover individual foods that are here now or might be in the very near future and how they can affect individual health systems like the gut microbiome and heart health.

[00:37:08] **Chris Vogliano:** Can't wait.

[00:37:13] **Ginger Hultin:** Our show is sponsored by Orgain and produced in collaboration with Larj Media. That's L A R G Media. Thanks for listening to this episode of The Good Clean Nutrition Podcast. To stay up to date on the latest podcast episodes, be sure to subscribe. And if you want to submit a voice message with a question or comment about the show, please visit healthcare.orgain.com/podcast to record your message.

And if you like this podcast, I'd love for you to let us know. You can rate and review this show on Spotify and Apple Podcasts, or you can give us a thumbs up on YouTube if you're watching right now. I'm your host, Ginger Hultin. You can find me online at gingerhultinnutrition.com. Thanks so much for listening.

Disclaimer: This podcast is for informational purposes only and is not intended to be medical advice. The material discussed on this podcast, and displayed on the associated webpage, is not intended to be a substitute for professional medical advice, diagnosis or treatment. Always seek the advice of your physician or other qualified healthcare provider with any questions you may have regarding a medical condition or treatment and before undertaking a new health regimen.