Matt Eastland:
Welcome to our final episode of the EIT Food Next Bite Recap Series. I'm Matt Eastland, and in this episode of the Food Fight, we'll be tucking into EIT Food's mission to build healthier lives through food. Nutritious and diverse food choices are essential for both personal health and the health of our planet. However, access for all to nutritious diets remains a pressing issue. Poor dietary habits are a major contributor to non-communicable diseases such as heart disease, stroke, colorectal cancer, Alzheimer's and type 2 diabetes. EIT Food is committed to addressing these challenges by promoting balanced, sustainable, and healthy diets. And one of the key areas on which health hinges is the gut microbiome. The microbiome consists of trillions of microorganisms, including bacteria, viruses, fungi, and other microbes that inhabit the gut, and play crucial roles in nutrient metabolism, immune system regulation, protection against pathogens, and much more besides. At our next Bite event in Rome, EIT Food hosted a panel discussion on how leveraging the microbiome can bring innovative solutions for a healthier planet and more resilient food system. Here's just a taste of what was discussed.

Yvonne McMeel:
Thank you all for being here today. And I think this is a very interesting topic. If I put my nutritionist hat on, I think of microbiome and the gut, but it's a lot more than that. So I'm going to start off with a question for Grace. So Grace, what are the opportunities for microbiome innovation in the agri-tech sector?

Dr Grace O'Gorman:
I think what was really obvious this morning from the open plenary is that microbiome research and its importance has gone really high up the agenda. It's of national strategic importance. And you can see that in terms of our policies and the critical mass. That in itself is really interesting. I'm very keen on the agri-food space, so that is particularly broad in terms of the applications and opportunities, we will cover livestock, aquaculture, crops and soils. And within each of those, there are a myriad of potential impacts that we can have in our sector. To give you some examples, in livestock in particular, we're all interested in methane emissions and reducing them. And there's significant research underway looking at understanding the microbiome in the rumen, and developing the new class of vaccines to target those methanogens and also in feed additives as well. So a very direct way in which the microbiome and understanding it can have an impact in terms of the planet as well. aquaculture is something we don't mention very often but certainly in fin fish and in shellfish understanding biofilms and the environments in which food is produced will have huge benefits and of course the ones that most people will understand I think here today is perhaps the soils and crops so whether you're looking at new classes of biofertilizers, whether you're looking at improvements in the soil microbiome, there's huge opportunity. So a

really interesting space outside of the human microbiome.

Yvonne McMeel:
Thank you very much. What you've spoken about, for me, maybe in my mind, I put that in the European perspective. So I wonder if I think of a more global perspective, and I think Fionnuala. Why are low- and middle-income countries crucial for the implementation of microbiome innovation? I can imagine there are many, but what would those barriers be for implementation?

Luca Simone Cocolin:
Maybe I want to give just a few numbers. For example, if you look in human microbiome data. Most of the data are coming from Europe, Canada, and US. It's more than 70% of all data that are available. But if you take just Pakistan, Bangladesh, and India, it's a quarter of the population. And it's only 1.8%, I think. of the data that we have on microbiome. So if we want to meet the sustainable developmental goals, we cannot ignore a population and what's going on in soil, plants, animals in low and middle income countries. So it's really important to push for more research in those areas. because that's maybe in those countries where they have to meet most of the challenges that we have today, climate crisis, food insecurity, malnutrition, double burden of malnutrition, obesity and undernutrition. So it's really important that we collect more data and knowledge on what's going on in this area if we really want to fight. And there is also other aspects that maybe we don't think about in some of this area, microbiome are really preserved because we are not having the same type of agri-food systems and practices. So we might still find also more biodiversity, discover new type of bacteria, new type of fungi, new type of microorganisms that can be really important. But I'm saying that not only for bioprospecting, but also from an ethical point of view, to have a better understanding and help population locally.

Yvonne McMeel:
So Craig, what opportunities do you see for microbiome innovation in scaling up alternative protein to meet the global protein demands, which we were all very well versed about or know about?

Craig Johnston:
Yes, so as we all know, sustainable protein is one of the key challenges for this and future generations. My company is a fungi company. actually using a microorganism that was discovered in the soil more than 40 years ago. But really across the spectrum of technologies, there's great opportunities for microbiome development. So broadly speaking, for meat alternatives, you would have cultured meat, you would have precision fermentation. and biomass fermentation. So there's a range of subsets of these areas. My area of specialism is in biomass fermentation and one of the key challenges for all startups or mature companies in this area is

productivity. So I think looking beyond conventional methods in terms of having a microbiome that can improve yield could improve robustness. There's also a lot of work ongoing by a range of organizations looking at sustainable feed streams. So being able to convert waste streams. We have a very innovative process where the waste from our processes then goes through a secondary fermentation. And I think these type of opportunities to co-locate two different types of processes will be very important and really developing organisms to help the productivity. of these processes and sustainability. So I would say that there's a great opportunity within productivity, sustainability, and also in terms of developing, rather than meat alternatives or mimicking meat, would also be to develop new concepts beyond copycat type products.

Yvonne McMeel:
Tanja represents the Microbiome Association. What gaps do you think need to be fulfilled in order to really implement and harness the benefits of the microbiome to really transform food systems? Because I think we've heard a lot here.

Tanja Kostic:
There are many things. There is, first of all, still an immense knowledge gap. What we realized is there was a lot of research done on the microbiome, but in a very isolated and silo way. So you only think about the gut. I think about what's done in primary production, how it affects the microbiome of the food and how then it resonates in your gut. So I think we need a much more of systems approach. We need to foster much better international collaboration and I'm talking here beyond Europe for two reasons. First of all, to close the gaps that Fannette was already mentioning, but second of all, to improve the synergies. If you think, for example, about major plant crops, they're important in different regions of the world. If we do have more coordinated research efforts, we would get more and better data to learn more about it. This brings me to data. In the past 10, 12 years, we have generated immense amounts of data if we think about sequencing data, the new technologies. And then there is always this push, like, Why don't we do more about this data? It's not harmonized. It's not standardized. We have a bunch of data, but we lack the metadata. There is no structure that holds it somehow together. So we are investing a lot of resources, but not getting the best out of it at the end of the day. Then, of course, we have the point that when you have something like already the companies here, when we have applications, we need best application technologies. And we have started in primary production or in aquaculture to develop solutions for single strains. But we need to think again, microbiome is a complex community and we need to think about application technologies that will support applications of these complex technologies, and in hand with that we need better regulation. The regulatory landscape is not really prepared for the complexity that's coming, so we need something that's of course protecting us and ensuring safety and security, but we need also something that doesn't expect the startup to wait for 15 years until

they can place their products on the market. And then, and I think these are also crucial ones that sometimes probably the scientific community lacks, and this is also where association again wants to come in, is we need to manage realistic expectations. Microbiomes alone are not going to make it. Again, we need to think about the systems approach, we need to think about the different players. We need to educate, we need to increase the literacy in the society at the consumer level, but also the policy level, at the regulatory level. And this is what we were trying to do a lot in the four years of the projects and that we want to pursue now in the next year.

Matt Eastland:
Thanks there to the chairs Yvonne McNeill and Luca Simonca-Colin, and the speakers Craig Johnson, Dr. Grace O'Gorman, Professor Piet Bogart, Tanja Kostik, and Fennette Fonatine for sharing their thoughts with us there. Now, over the course of a lifetime, the food we eat can drastically shape the health of our bodies, our minds, and the planet. To help unpack the impact of food on each of these areas, EIT Food hosted a panel discussion at Next Bite on empowering healthy aging through food and nutrition.

Lorena Savani:
So, welcome everybody. Thank you for being here today. Today we are going to talk about a very important topic, healthy aging. We are going to have, we are having the pleasure of having Matteo Cesari from the World Health Organization. He is the head of, the unit head of healthy aging and health in World Health Organization. And actually he's going to talk about the global initiative of the United Nations Decade of Healthy Aging. which is from 2021 to 2030, which is a global initiative which is actually being led by the World Health Organization and it's aimed to promote the better health, prevent disease, enhance the quality of life for older adults and their families and communities.

Matteo Cesari:
Good afternoon, everyone. Thanks a lot for being here. Healthy aging is something that touches every one of us. Every one of us ages since his birth. And this is a United Nations initiative. So every member state across the world agreed to declare the decade between 2021 up to 2030 as a decade, a time for working together to transform the world where we live in a better place where to grow older. The world is rapidly aging. We have the idea that aging is a phenomenon occurring in high-income countries, whereas 80% of older persons will reside in low- and middle-income countries by 2050. And at the same time, not only there is a huge increase of older persons across the world, The problem is also the speed of ageing, the pace of ageing across the world, especially in low and middle income countries. So we are facing an accelerated ageing of our population that brings new challenges in our societies as a whole. In 2015, I was saying that WHO started discussing about healthy aging in this publication, the World Report on Aging and Health. In this

publication, it was for the first time defined what healthy aging is. Healthy aging was here defined as a process developing and maintaining the functional ability that enables people the well-being in older age. What is functional ability? This is another construct that is presented for the first time in this report. Functional ability is resulting from intrinsic capacity, the environment, and the interaction between the two. What is intrinsic capacity? Intrinsic capacity is the composite of all the physical and mental capacities of an individual. So everything under our skin allowing us to function. We develop our capacities during the first part of life and during the second part of life we have a decline in our physical and mental capacities, part of aging. We have this declining trajectory in our organism. The objectives of our life, nevertheless, remains relatively stable. What gives value, dignity to our life, remains relatively standardized across the stages of life. The gap between our capacities and our objectives in life is representing the environment. If we live in a negative environment, so we are excluded from care, we have financial issues, we have social problems that may impact on our life, then our capacities will not be able to fully express their function and their abilities. And this is closely related to the quality of life, to the achievement that the person may obtain for himself, but also for the sustainability of the community and of the society. How does it relate to nutrition? Because we are here in the next BYE 2024. Now, one of the domains of intrinsic capacity is the so-called vitality domain. If we think of which are the physical and mental capacities affecting the functioning of our organism, the metabolic capacity So the capacity of our organism to metabolize the dietary intake and produce energy is one of the most fundamental ones. In the WHO, we published a document a few years ago where this capacity-driven approach to the older person is structured across different symptoms, signs that are typically related to aging, but are not part of normal aging, are indeed deviations from the normal trajectory of healthy aging that are here summarized by limited mobility, depressive symptoms, cognitive decline, hearing loss, visual impairment, and malnutrition, in particular weight loss, loss of appetite. Weight loss and loss of appetite represents a critical risk factor for the loss of independent life in older persons. And we need to think about how this has a preventive relevance for implementing preventive strategies and how this talks to a life course approach. Because here, I'm not talking only about older persons. I'm talking about the capacity of the population to develop and maintain their capacities over life and prevent the decline during the later stages of life. And of course, the more we build our reserves during the early phases of life, the more reserves we will have in the future when we will be old, in order to face the endogenous and exogenous stressors leading to disability and adverse events. So the evidence today is well established at saying that oral supplemental nutrition with dietary advices should be recommended by persons, older persons affected by undernutrition. So this is a reversible risk factor, critical for the well-being of the older person, that can be implemented even at earlier stages of life, Now, the decade of healthy aging is built on this framework of healthy aging. Mainly, the work is structured around these four

action areas. First of all, we need to change the way in which we look at older persons and the aging process per se. There is a stigma, prejudice, aging is seen as something negative. We need to work on age-friendly environment. What does it mean? We need to change the structure where we live and improve opportunities for the aging population in order to reduce the gap between our capacities and our abilities. And then there are two action areas that we have distinguished in two parts, but in reality are both talking to the same activity, that is to ensure a continuum of integrated care. We want to look at the person in a more comprehensive way by looking at the capacities of the individual, So we want to develop a model that is multidisciplinary, that is touching multiple aspects of the health of the individual, including the nutritional aspect, in order to be sure that the trajectory of healthy aging of the person is maintained and preserved. And to do this, and I'm going towards the end of my presentation, we have different enablers. How we can achieve these four action areas against ageism, improving age-friendly environment, build better care infrastructures, we need first of all to listen to the voice of the persons that are directly concerned. So the multi-stakeholder panel of persons that are involved with aging, every one of us may contribute to this initiative. And older persons should be better listened in terms of priorities and needs, because the priorities and needs of older persons are not the same of adult and younger persons. We need to build leadership, we need to drive these changes and this means start developing activities for building capacities across our societies. Very often we are not used to talk about aging and there are no competencies on how to approach to the problems of older persons. We need to start this process for reorienting also care towards meaningful objectives. We need partnership, we need to connect the different stakeholders and then we need to innovate and develop new research. Now we are in an environment here where research and innovation are key words. but how much of this research is focused on the new problems, emerging problems of the aging population. If we do not take them into account and we do not develop specific targeted research, we will miss a lot of opportunities and we will not be able to get meaningful responsive results. So in conclusion, nutrition of course is a critical determinant of healthy aging. It's nested in the key concept of intrinsic capacity at the basis of healthy aging. It plays a relevant role in defining the healthy aging trajectory for each of us. Having access to nutritious food, quality food, is pivotal for improving, in a life course approach, the improvement of healthy aging. We need, however, to be sure that our interventions are sufficiently personalized to the specific needs of the aging population. there is an heterogeneity in the aging population that needs to be taken into account because the one fits all model does not fit with an aging society. And we need to develop this narrative for building interventions that are more suitable. In this context, talking about research, innovation, partnership, the leadership and involvement of also the private sector, I think that the year-end decade of healthy aging represents a critical opportunity, not only for talking about healthy aging, but also for giving visibility even more to the field of nutrition. That is a critical determinant for

healthy aging, but very often, I'm talking again as a clinician, is neglected in our daily activities. And so we think of the older person's weighting loss as a normal part of aging. That's not true. We need to recognize, we need to build capacity and we need to develop interventions for tackling these signs, symptoms, issues of older persons that are burdening the person but also the society as a whole. Thank you.

Matt Eastland:
Now one thing which is really revolutionising the world of health at quite a pace is AI technology, and one area that is aiming to utilise the massive potential of AI is personalised nutrition. Valued at $3.7 billion in 2019, the industry is projected to grow to a staggering $16.6 billion by 2027. And companies in this ecosystem are increasingly relying on AI to deliver ultra-personalized products and services to a broader audience, while also addressing the needs of both people and the planet. To help us explore the intersection between personalized nutrition and AI, here's an excerpt from a panel discussion recorded next by 10 October.

Mercedes Groba:
Join me to welcome the panel. So, Rick Schneiders from Siemens, Tony Hunter from Future of Food Consulting, and Mariëtte Abrahams from Kina. Let's start from where it all begins, data. As you know, data is the tool we use to understand the universe. Humans are data. And in fact, today we are producing data right now. However, if we don't effectively manage this data, we don't go anywhere. So this is clear. So let's start with you, Rick. So you come from a leading software company that you help companies to process data. So you might agree with me that we are swimming in an ocean of data. And this is only going to increase. We are producing data everywhere. So the question is, what we are going to do to avoid drowning in this data? How we are going to manage the data now and in the future?

Rick Schneiders:
Yes, hello everybody. My name is Rick. I'm working for Siemens, a big industrial automation company, and what we're actually doing in personalized nutrition, or in general what we can do with personalized nutrition. I think there are two elements, of course. You have the consumer and then you have the B2B. And I think it was super interesting also to see that all these huge, large companies are already looking into, okay, what can you do with personalized nutrition? It's starting, of course, with the consumer, with the person that shares the data via a watch or different other points of data, and then you're going to collect the data. But do you really want to have all that data? So I was quite pleased to see that structuring the data is one of the most crucial points, right? Because having a lot of data in general, it's nice, but which qualitative data you really get, that is the most important relevant point. So if you look a little bit more to Siemens, what we're actually doing in the industrial side is that you are actually

managing, monitoring a lot of data already on a physical machine or on the human. So basically you're making already decisions on the device itself. So you don't want to have all your data in the cloud, but you for example are making already decisions. locally, so it cannot be on a body, but it can also be in a production process. So by having this already data analysis, you can, for example, also say I only want to have certain measurement points that, for example, are not good. Then you don't need to share all the data, but then you have only certain data points that are being shared. And if you have this data, then it's being already more structured, more optimized already up front. is basically creating an infrastructure, what kind of data points, what was quite interesting to see in detail, mapping and what you really need. And that is, yeah, that's just doing, learning by doing, I would say.

Mercedes Groba:
Let's start with you, Mariette. You are a nutrition expert, and you know very well, you're better than anyone, that analyzing data is just half of the battle. So, do you think that the technologies can really understand the individual needs, and especially how unique we are all, so different gut health, different microbial body needs. Do you think we can trust in a technology with that?

Prof Mariëtte Abrahams:
So I would say for now the short answer is probably no. Because as we think about the science and what we've learned here as well is that the science is really emerging but personalized nutrition in itself is not new. As nutrition experts we've been providing personalized nutrition for a very long time already. But I think when we think about the technology angle, we need to think trust is a big issue for consumers, of course, because can consumers trust which technology it's using to actually provide that recommendation? So can they trust the advice that is given to them? Secondly, we need to think about, well, actually, can we trust the scientific papers or the databases that that advice is actually based on, because we know that when it comes to genetics, for example, when it comes to microbiome, when it comes to wearable data, this is all from people who can actually afford these kind of solutions, who can actually use a CGM or use an Apple Watch or do a genetic test or a microbiome test. So the data that we have at the moment is practically quite biased and it really speaks more to a population group that is already more wealthy and more healthy and can actually afford it. So if we're thinking about a wider database and what the AI is pulling on to provide those recommendations, we should really be questioning and always looking. If we look at exactly healthcare professionals, they are not trusting the AI because they don't know what the data was based on, first of all. And the biggest concern of healthcare professionals is the widening inequality that we see the more AI is integrated. So I think these are huge concerns. that we need to consider and then we need to address. But, of course, technology is the future. And I'm an entrepreneur, I'm an optimist, so I definitely see the future, but I don't think we are asking the

right questions enough to make sure that consumers, healthcare professionals, and also the technology companies are asking the right questions so that we don't avoid the ethical consideration of how fast AI is developing and being employed in the industry.

Tony Hunter:
And I think, too, the thing we need to look at is, as Mariette said, The advice that's given by the AI is based on the data it's trained on, the scientific papers. Now, one of the things someone pointed out to me a while ago was what they called the temporal nature of truth. In other words, what is true today may not be true tomorrow or a month or six months' time. And making sure that your AI is up to date with the latest data and the quality of that data in terms of peer-reviewed papers, things like that, gold standard research, that I think is an ongoing issue, and keeping these AIs up to date, so it's providing the latest data, and as you pointed out, Mariette, that's appropriate to your particular situation, is going to be an ongoing issue.

Prof Mariëtte Abrahams:
Certainly AI will replace some human experts. but the AI will definitely replace human experts who don't use AI. That is for sure. So I think the magic will be where AI can be used in combination with healthcare professionals, because as Mike said, it could be the AI is much faster at synthesizing data, but the role essentially of the healthcare professional will essentially change from one who's really the knowledge expert to one who can actually helps them to change their behavior, which the AI can't do, because you can give as much data and wear as many wearables, but if you're not willing to change your behavior. and know how to actually achieve that, that's where the nutrition experts will have an excellent role. But I think we have a huge gap in terms of the knowledge, in terms of technology and healthcare professionals, so there's a lot of education. I'm part of the education system at the moment, nutrition practitioners, so I think in the future, nutrition practitioners not only need to know what AI can do, how it works, and how it helps them, but they should also be involved in the product development phase, of products so that they actually can have more trust in the solutions that come onto the marketplace. So yes.

Mercedes Groba:
And in fact, Tony, you mentioned yesterday in your talk about AI and the potential and the future for the AI and technology. So do you have any thoughts on what Mariette just explained?

Tony Hunter:
A couple of things. I suppose in the longer term, I'm a little bit more bullish than Mike. I see generative AI rather than the traditional AI we've been using for decades as being the centrepiece of personalised nutrition. It will be the repository of all the

data. It will have a digital twin model of each of us individually with our individual microbiomes, our individual genetics, and everything. And that, for me, is what will drive the long-term personalization of food. I agree with what Mariette's saying is that we still need human oversight, particularly at the moment. As someone said, I didn't make up this quote either, but someone said to me, they said, Let's not confuse artificial intelligence with artificial wisdom. They're not the same thing. So at the moment, humans' oversight is required. I'm a little more bullish in the long term, particularly if we have true digital twins. I mean, one of the ones I talk about, there's one called Harvey and Harvetta. models 80,000 biochemical reactions, 26 organs, six blood groups, and the microbiome to look at your reactions and predict your reactions to food. When you start crunching the numbers, those sorts of numbers, and that data points, we could have billions of data points a second coming out of this room in 20 years time that has to be analyzed. And I think that that generative side of things is really going to have a huge effect.

Mercedes Groba:
Thank you so much. So coming back to you, Rick, and to discuss another important element on this, which is accessibility. So today not everyone can afford to go to a human nutrition expert, so it can be a little bit like you think it's something like a luxury service. Do you think that AI and technology can be part of the solution to make this personalized nutrition through technology more affordable, inclusive and accessible to everyone?

Rick Schneiders:
Well, I think definitely AI is going to disrupt many, many business models and lives of everybody, right? So I think with personalized nutrition in general, a lot is now advising, right? We advise what somebody could eat or should eat. But in the end, if you have AI, of course, the power of AI is that you can analyze really large data sets. So with all the data, you can, of course, create an optimized measure of a certain group. I was really triggered about the group. Well, who is the group? Is the group only the one with an Apple Watch? because that's maybe not even the group that you want to target. So this is a real interesting point, because if you go one step further, what is actually the next step of personalized nutrition is that you're going to adapt our food, that you make, for example, more food groups, that you have personalized food subgroups. And if you want to create it, you, of course, want to create it for everyone, not only for a certain group that is wearing an Apple Watch. And here comes, of course, the crucial point is that if you want to create that, you need to have a lot of data points. So I think it definitely will change. It's already changing everybody's lives, right? But AI will make it more affordable, will make it more efficient, but we're definitely not there yet, but it definitely will have a big impact on our whole food supply chain and food system.

Prof Mariëtte Abrahams:
I'll just add to that because I think at this point the USA is doing quite a good job in terms of the food as medicine movement and the reason why it's so effective is that they've identified, you know, managing chronic disease is a huge issue and food and lifestyle has a big role to play in that. But what they got together was the regulators, the government has put up $2.5 billion for startups to create solutions, the retailers are on board, the insurers are reinsuring, the regulators are now reimbursing medical nutritional therapy, so it's not just in-stage kidney disease and diabetes, and so they can access nutrition experts and be reimbursed. If you are on food assistance, you know where to get your food stamps. The retailers are reimbursing that, they're accepting the vouchers. So you can see that it's accessing a much wider group, but it actually requires everybody to come together. Whereas in Europe, people have to pay out of pocket to see a nutritionist or a dietician. So there are already barriers there. more healthier foods, as we know, it's more expensive. And so there are so many barriers to just making healthy living a lot easier. So I think if in Europe especially, there could be probably more locally, not thinking completely widely broad, but European wide, but there needs to be a better coordination to really address the issues of why nutrition is becoming or lack of good nutrition is becoming such a huge issue and has these knock-on effects on really preventable chronic diseases. So that's where I think there's a huge opportunity.

Matt Eastland:
Health on the level of the individual is only one side of the coin. The health of the planet is another key area that EIT Food is committed to. Here are a few conversations we had about sustainability in the podcast booth at NextBite 2024. Dr. Glenn Matterson, welcome to the Food Hype podcast at NextBite. What a pleasure to have you on the show. Thank you, man. Can you tell our listeners and the people attending the event a little bit about who you are and what it is you do?

Dr. Glenn Matterson,:
Yeah, for sure. I will take two heads if that's okay. So I take my day head and then my night head. So my day job, I'm running a startup. The startup is called Albert. We were at EIT Food, one of the rising food stars in the early days. What is Albert doing? We try to make healthy eating easy. and we do it in the field of food robotics. So what we've made is the first robot that can make pure, fresh smoothies, but also hot soups, so we can do hot and cold. We start from frozen, pure ingredients. So imagine a vending machine. You see strawberries, blueberries, carrots, mushrooms, and these are transformed on the spot into a healthy blend. So we're now scaling this through in Europe. We're active in Belgium, UK, Netherlands.

Matt Eastland:

I've had some of your smoothies from your vending machine, so I'm looking forward to seeing more of those. All right. And you'll be speaking at Next Bite, and so for people listening into the show, can you give us a bit of an outline about what you're talking about and any key takeaways?

Dr. Glenn Matterson,:
Perfect. It leads me to my night job. Your night job. So apart from being a dad of two wonderful kids at night, I'm heading the EIT Food alumni board. And that was also the talk today, what it was about. So basically EIT Food is organizing a lot of programs. They can be educational or they can be on the entrepreneurial side. Out of these programs come a lot of human beings, let's say, who have been enlightened with one of the programs. So basically graduates. And we gather them all together in an alumni association. So today there are 4,000 registered alumni. So again, this can be students who do summer school, can also be full-fledged master's students who did like the full master with EIT Food, but it can also be an entrepreneur who had a startup who went to rising food stars like myself, for example. And so I'm heading the EIT Food alumni board. We are seven in total, and we are in the creation of an independent association to really start driving this alumni culture. And the talk today was mainly about what I called it Roots to Rice. You have to find a title. But what I believe is that EIT Food does a lot of amazing stuff. But when I go to a tech event, for example, in my country, in Belgium, and I ask the food tech then, and I ask the crowd, who knows EIT Food? 10% maximum is raising their hand. Now, I might be a bit intrusive in raising their hand question, but I mean, it is very low. So I think the alumni can be a bottom-up force to actually talk with each other, motivate each other, and actually also locally, in the local languages, try to get a bottom-up approach. AT Food has hubs, right, and they are local, but it's still a little bit that ivory tower idea that it feels unreachable, it feels so big, it feels so huge. So I think we need to reach more everybody in the food system. And I think these alumni are the perfect option actually to go for.

Matt Eastland:
And what specific services do you offer the alumni?

Dr. Glenn Matterson,:
So we're now in existence for one and a half years. Our mandate will end in May. So then the two years of the first board is done. The specific services are we organize online webinars where people can connect with each other around a thematic webinar. Next week there is one Friday or about a breakfast session. Very casual. talking about a topic, sharing ideas on a morning coffee. We organize a mentorship program. Again, very low level. This is our key that we always try to have. It's very easy to enter. There's nothing to pay. It is very easy. You can find a mentor to your size. Do you need somebody for career advice? Are you a startup founder that needs to

scale? We find you a mentor that scales. And then lastly, we are organized on a country level. So we also have country representatives who communicate in the local language of the country. and they then organise local events in person. These are very informal, so this can be literally a group of 20 alumni or related to the food system people who go for a drink and talk about a certain topic. So it's very low level, very easy entry.

Matt Eastland:
So what's next then? What are your goals? Where are you trying to take the alumni community?

Dr. Glenn Matterson,:
My main goal from the start was I want to get it set up and I want to have it independent financially and organization-wise. I think too often with EU subsidies, it might be a bit offensive, but I think too often people do the minimum they have to do with the money that is given. I want to do the maximum that we can do with the money we can find. So not what is given, what we can find. So I really try to put the mentality in our whole group, like we're not there to get some money from EIT and then to organize some events. We are here to make this huge. And by making it huge, we will have more people influenced, more people going to the programs and a thriving community. So my goal is to have it financially independent and self-sustaining before the end of my term, so in May. We're well on the way of doing that. And then also to have baseline revenue streams that come in that are recurring, so that are yearly recurring. And then have the country rep. I want to have two country reps in every country. We are now halfway by approximately. And then after that, make sure that the programs we do are actually successful, right? So the mentorship program will launch now next month. I want to make it a successful program, thrive. And so yeah, this was the goal still May. And then I headed over to the next volunteer.

Matt Eastland:
Well look, huge congratulations on all the great work you're doing. So just for people who want to find out more about you, Alberts and the alumni community, where do they go?

Dr. Glenn Matterson,:
So for Albert, I would say connect on LinkedIn. That's usually the best way. So reach out to me, Glenn Matheson, on LinkedIn. For Albert, it's alberts.be. It's not about being Albert, but it's about Belgium. Although it sounds kind of good. It sounds kind of good. And then for the alumni community, we have a LinkedIn page, which is the easiest. Follow that one, and then reach out to us personally on the LinkedIn page in order to get in contact and to see what is best for you. We are still scouting country reps. So I want to have two in each country, and we are halfway. So if you say I want to do

something good and contribute, then yeah, get in touch and we'll get you set up.

Matt Eastland:
Glendale underscored the immense value of fostering connections across the agri-food sector. But it's not just about linking businesses and entrepreneurs. Consumers must also feel connected to the system as well. In an era rife with greenwashing, helping people understand the true environmental impact of their food choices and building trust between consumers and the companies they support is critical to creating a healthier, more sustainable food system. This dynamic relationship is something Cliona Howie understands deeply. She joined us at the podcast booth during Nextbike 2024 to share her insights. Here's what she had to say.

Cliona Howie:
So I'm Cliona Howie and I've recently joined EIT Food about two months in and I'm the ex-CEO of Foundation Earth which was a non-for-profit organization supported by EIT Food for the last four or five years on bringing environmental impact of food and beverage products to life. and being able to communicate to that consumer. So the idea here at NextBite is we're going to announce how are we going to continue that work of Foundation Earth at EIT Food, why EIT Food is the right host for that platform, and really get the message out about what we're looking to do and how we're willing to build on that work and drive and catalyze food change.

Matt Eastland:
Fantastic and we'll absolutely get to that. I'd love to hear a bit more about the new brand and all the great work you're trying to do. Before we talk about that maybe you can give us some of your like top highlights, proudest moments from your time at Foundation Earth.

Cliona Howie:
So at Foundation Earth, we worked with companies big and small across all types of food categories. So from pro-veg to pro-meat, from sweets to drinks. And we looked at environmental impacts across a whole range of the whole life cycle, basically. Farm to fork doesn't even really cut it, right? Cradle to grave is a better description. And we looked at what those environmental impacts were, collecting data, which is really hard to collect, analyzing it, and then figuring out how to communicate that to a consumer. And that's a really tough job because consumers of food are anywhere between 10 and 90 years old. And it's something that every single person on this planet does. It's not buying a washing machine, it's not buying a car, right? So it really, really touches every single citizen. And it's incredibly emotional, incredibly cultural. and communicating in a way that's effective so people understand, do I care about environmental impact of the food I'm eating? If I do care, how do I want to learn about it? Do I really want to do a PhD every time I'm

buying my food at the grocery store? Or do I just want something easy and informative that I don't have to think? And what we nailed it down to is that one of the highlights is trust. Trust is absolutely fundamental and trust is one of those intangible things in life. super easy to lose and really difficult to build. So I think one of the proudest things at Foundation Earth is how we managed to set up a structure, a governance structure, an engagement structure that enabled trust and captured trust and we held on to it. Another thing we did to gain that trust, which I'm really proud of, is we were one of the first environmental labeling schemes to go completely open source. And that feels like it should have been a default in the system. If you can't understand how something was calculated, what measurements were done behind the scenes, why would you trust it? But it just wasn't the default in the market. So we went completely open source and I think we kind of broke the seal on that because a lot of other schemes kind of followed suit after us. And I'm really proud about that because I think that we kind of led the way. And I really think that ethos fits into DIT food as well, right? Transparency is key.

Matt Eastland:
Absolutely. Yeah, I mean, what we're trying to do here is achieve impact together. It's not about competitiveness, anything like that. It's just about making the food that we eat better. So really love that. And tracking to the present day, you're now working on something called the International Alliance for Food Impact Data. So maybe you can give us a very brief description of what is that and what are you looking to achieve with this new alliance?

Cliona Howie:
So, although we boiled it down to like really quite simple communication on a grade, right, that works in both supply chain and to the final consumer, the entire concept of what we're trying to do is actually incredibly complex, incredibly challenging. We're talking about big data, we're talking about confidentiality and transparency in the same sentence where People don't really want to give up their data, their trade secrets, their recipe secrets, but they do want to be evaluated on a credible system. So this is an incredibly complex thing, not to even mention the policy side, right? So there's new policy coming out, there's the EU Green Claims Directive, there's Empowering Consumers Directive, Sustainable Product Directive, and this really takes an army, right? To establish standards, to maintain those standards, to evolve with the science because as we know, DIT food, innovation is changing every day. So what we knew yesterday does not necessarily hold true today. So it's changing so quickly that what we've decided is we need an international data alliance to really pull this together. strengthen numbers, we also need to make it inclusive and fair. So we need to hear all voices. One of the biggest challenges in the food sector today about transformation is we're not hearing from all the voices. We need the farmers included, we need consumers included, and everyone in between. And that includes NGOs, that includes standards

bodies, that includes the policy makers. So the concept here is to create this international data alliance so that EIT Food can convene across a very formal but clear platform of what we're trying to achieve, and make sure all those voices are brought in, make sure insights are brought in, make sure innovation is brought in, best practice in science is brought in, and then use all that collective work for public good. So absolutely, this is what we're launching at NextByte. This is what we're bringing now the stakeholders together to work on. We've got a thousand people here. Almost every single person at NextByte is working with environmental data in one shape or form. So really about how can we pull that together at the Alliance in an effective and impactful way.

Matt Eastland:
The restaurant industry is another sector with a huge role to play in building healthier lives, but figuring out what you need to do to make your business more sustainable can be a complicated process. One organisation which is helping to demystify that process and provide the hospitality sector with the resources they need for a just and tasty transition is the Sustainable Restaurant Association. I spoke to Julia Holliday, Head of Global Certification at Nextbyte 2024 to find out more.

Julia Holiday:
So I run the Food Make Good Standard, which is a certification for restaurants to help them improve the social and environmental impact of their operations. So we look at sourcing, the society practices, so what they do with their staff, how they feed their diners, how they work with their community, and then also the environmental impact of their operations, so how they manage their waste, water, and energy. And then the sourcing bit is more about the supply chain, so human rights, how they work with their suppliers, traceability, and the choice of ingredients.

Matt Eastland:
So you are one of our speakers at NextBite. So for our listeners and anyone who isn't attending the event, can you tell us a bit about what's the outline of what you're talking about and any key takeaways that you'd like to leave for people?

Julia Holiday:
So our panel is about the role of food service in a just and tasty transition. So when we talk about green transitions, the food system is often left out of the conversation and food service is not even mentioned. But food service is a really important lever for change. So what we're talking about is how food service has a really important role to play. Don't forget about us. Also come and join us. We are a very diverse sector with no one single solution to being sustainable. Unlike, let's say, in the energy world where transition to renewables would have a massive impact. There's

nothing like that in our sector. So how food service can actually bring together that diversity behind common goals to reach our global vision, which is the UN SDGs.

Matt Eastland:
You mentioned the Food Made Good Standard, love that name. So can you explain exactly what that is, or unpack it a bit more for us, and the problem that you're specifically looking to solve with the standard?

Julia Holiday:
We know that sustainability is multifactorial, and also can seem really overwhelming and really abstract. And what we saw was needed from the restaurants we worked with is a way to identify where to start, basically, and what practical things they could do. So we created the Food May Good framework, as I said, sourcing society and environment with 10 impact areas. And then the standard is a way of helping restaurants measure what they're doing, capture good practice, and then also identify things that they can do to go further. So they go through an assessment, which is assessed by our team, looking at documents and talking to the restaurant. And then they'll get a final report and a logo at the end, a star rating. And the final report is designed to help restaurants prioritize their actions, say, oh, you can do this. Things like something so simple as install bins, recycling bins, or create a policy and put that in place.

Matt Eastland:
So it's very practical. Very practical. OK, I like that.

Julia Holiday:
Because sustainability is we need to do something. But what? And what can be done? It can be so overwhelming. But also we're talking to people that aren't necessarily sustainability professionals. So what works in a kitchen? So we're very focused on practical action. And then the logo and the rating is designed as well to help. The businesses we work with communicate about that process and say what we're doing has been looked at, it's credible, we're not greenwashing and we're proud of what we do. And so to build consumer trust and also staff trust as well that what we're doing is good. If you want, on our website we do a lot of case studies of different people, different businesses, and a lot of also practical tips. So if you want to look at a different area, food waste, or sourcing, or treat staff fairly, a lot of people working in disadvantaged communities, there's a lot of information on there.

Matt Eastland:
So the SRA, like EIT Food, is a membership community with the goal of improving the food systems. How important do you think that

collaboration between stakeholders within the community is to drive that change? Is it critical?

Julia Holiday:
Yes. I mean, it's kind of a truism, but we need to work together. Everyone needs to do their bit, but doing it alone won't make a difference. The difference we need, yeah, that's one of the reasons I wanted to be here today, because EIT is working towards the same goal in a different way. And the SRA tries to do is to drive change in the hospitality sector towards something that is environmentally restorative and socially progressive. And that involves talking to loads of different people and sharing best practice and playing to people's strengths. Like a small business, it might be really strong on sourcing, but a big business, might have more practices in place to tackle their environmental impact or their energy use, because that's kind of their focus and that's what they're looking at with their net zero strategy. And both of those are contributing to our wider goal. So, yeah, critical, basically.

Matt Eastland:
It's critical, yeah. It's really important. It is really important. Thank you. And so, if you look forward, what do you think the future of sustainable restaurants look like? What's your hope, I guess, for the sector?

Julia Holiday:
My hope is that it becomes much more normalized and widespread. I think that sustainability in general It can't be something siloed. It's basically just good business sense, but it's also kind of good moral sense. So it needs to be integrated in the way we think about things from the beginning. Sustainable menu design, the choice of your suppliers, really practical things that don't necessarily scream, this is sustainable. But it just, it's a better way of doing things. So my hope is that that becomes more accessible, more widespread. And also in such depressing times that we're living in, let's be honest, it's a bit scary at the moment. I hope we keep the joy around food and the hope because there's a lot of good things happening. It creates good feeling, so hopefully we can keep that and make it move in the right direction.

Matt Eastland:
Delving deeper into the theme of sustainability in the hospitality sector, I had the opportunity to speak with Dharath Hoonchamlong co-founder of Wasteland. Tarat brings a multidisciplinary perspective to the intersection of food, hospitality and sustainability, and offers innovative insights into how these areas can work together to drive meaningful change. So, Dharath can you tell us a little bit about who you are, what you do, and the company you co-founded, Wasteland, Thailand's first sustainable bar?

Dharath Hoonchamlong:
To sum it up, I'm currently an independent consultant for our advisors for sustainability, especially in food beverages and hospitality. So I work in wide ranges from helping open up restaurants to making sure this event, operations, or party is a zero-waste kind of concept or executions, or even guest lecturings and doing business development for many other companies.

Matt Eastland:
Talk to me about Wasteland and your bar. So can I ask you, are bars particularly unsustainable?

Dharath Hoonchamlong:
That depends on how you put it, but also to give you a little bit of backstory, even the cocktail culture has been there in Thailand for decades, but it hasn't been revived or put into a contemporary map. until 15 years ago. So it's pretty much ensued in infant mode. And then the industry was really small back then. So what they were doing was basically like building more bars, more people, more bartenders. And that leaves so little room to touch upon other topics, let alone like sustainability. Even when we first co-founded Wasteline, we had, to be honest, we had pushbacks from the industry. Like they weren't really getting it. Because back then, sustainably, or even a concept like how food is handled, or stages of food, wasn't fully comprehend back then, even up until now. They don't know the difference between food surplus, food waste, or plate waste, things like that.

Matt Eastland:
You're one of our speakers at Next Bite, so maybe you can give us a little bit of an outline for our listeners. What's your talk about, and any key takeaways that you'd like for our guests to know about?

Dharath Hoonchamlong:
The panel that was just on was a way to introduce people that the restaurant industry or hospitality industries can actually have really big impact and also can be the industry that transform like food system into a more just way or like more sustainable ways because the community is so big and it connects to so many people not just producers or farmers but even consumers and they tend to think that it's not much of impact it can make. But together with backgrounds and roots and food cultures identity, like we can learn so much more from each other on adapting to like not just climate change, but also implementing new technology as well as like going back to roots of how we perceive and interpret food back then.

Matt Eastland:
And just do this for me and also for our listeners, I need to

picture your bar. What is it specifically about the bar that you founded which makes it look and feel so different? Or is it the ingredients that you're serving? Is it the way that you do things? Is it all of those things?

Dharath Hoonchamlong:
A little bit of everything, but of all of that, I think the way we structured it, because how a restaurant or bar is structured is like, you have the space, right? And you have the boss and then the team. But the way we structured the bar was that we pitched it as a community space. So we wanted to work not only with brands of bars or booze, but also to show that bars can also connect to farmers as well, can work with social impact. communities or even non-profits as well on or even designers and artists and that's how we're being together like people from the different industries who also touch upon sustainably environment or activisms and then present it together like through beverages or experiences.

Matt Eastland:
That's great by setting up the bar you're basically driving connections across the different supply chains. Yes. That's amazing and you mentioned farmers there and I read in your bio that you're based in Bangkok and I know that you're working on experimental projects with farmers and communities. Any experiments you're able to share with us? I'd love to know what the kind of things you're doing.

Dharath Hoonchamlong:
Wasteland was also conceived during COVID. So it was even the structure I mentioned, also how we adapt to curfews and lockdowns and everything back then, it was, gave us really flexibility and adaptability to go with whatever comes up. So we had the time when we had the physical space. So that allows us to do a lot more in terms of like, from taking produce or working with farmers on what could possibly be done with these parts or excess that they have, or they haven't had the tools or the capacity to process that yet. So we turned that into ingredients. Like, for example, one of the small chocolate factories, they source everything from local cacao around Thailand. They roast everything. They do the whole process. But one thing that they couldn't deal with is the cacao husk. So we took that and we turned it into this cola, and then there was just another station, or even bar snacks, and introduced us to people. And now we've been collaborating for like four or five years now, and we're looking to expand into newer products. You know, for them, there's only one thing they couldn't process. But not for every farmer. Some farmers, they have more than one part or ingredients that they're still dealing with. And we're like working with them.

Matt Eastland:
So you're finding the challenges that the farmers have and then just

finding innovative ways to solve that. Yes. A big thank you there to everyone we spoke to at EAT Foods Next Bite 2024 event for sharing some of the amazing work you're doing towards achieving healthier lives through food. These are just some of the insightful conversations we had at Next Bite 2024 in Rome in October, and you can listen to our previous episodes exploring net zero food systems and reducing risk for a fair and resilient food system wherever you get your podcasts. For more insights, visit EIT Food's website at www.eitfood.eu and join the conversation using the hashtag EIT Food Fight on our LinkedIn channel. Thanks for tuning into the Food Fight podcast. Don't forget to hit the follow button so you never miss an episode. Thanks, everyone.