

30 Does food need to be packaged

Matt Eastland [00:00:06] Hello and welcome to another episode of The Food Fight podcast. I'm Matt Eastland.

Lukxmi Balathasan [00:00:11] And I'm Lukxmi Balathasan.

Matt Eastland [00:00:12] And we're both of EIT Food. Europe's leading innovation community working hard to make the food system more sustainable, healthy and trusted. They say it's what's on the inside that counts, but when it comes to food, it's often a different story. Today we want to talk about the outside, a.k.a. food packaging. Why it's such a contentious issue and why we need to push for better solutions. So does food need to be packaged?

Lukxmi Balathasan [00:00:43] And joining us today for this episode is Archana Jagannathan, the Senior Director of Sustainable Packaging at PepsiCo. Hi Archana, thanks very much for joining us today on The Food Fight.

Archana Jagannathan [00:00:52] Hi, Lukxmi. Great to be here. Thank you for having me on this podcast.

Lukxmi Balathasan [00:00:56] And also, we have Daphna Nissenbaum, the CEO and Co-Founder of TIPA. TIPA is a fully compostable packaging company that replaces conventional plastic applications. Hello, Daphna. Thanks for joining us.

Daphna Nissenbaum [00:01:09] Hi. Thank you for having me today. A pleasure to be here today. Thank you.

Lukxmi Balathasan [00:01:13] Great.

Matt Eastland [00:01:14] Great stuff. Thanks to you both for joining us. Before we get into the specifics of what you do at TIPA and PepsiCo, in your own words, can you explain to us or why is there such a need for us to be talking about food and drink packaging right now? So Archana, maybe we can start with you?

Archana Jagannathan [00:01:34] That's a great question Matt and I was intrigued when I saw the title of the podcast that you sent me, does food need to be packaged? My view is food packaging waste today is probably one of the most important topics and issues facing our generation. But if you take a step back, to maybe two, three decades ago, packaging is really what has driven the growth of the food system over the last few decades. And that's primarily because packaging plays a very important role, plays a very important role in keeping food safe. It plays a very important role in reducing food waste. It also allows companies like ours to provide information to consumers to allow them to make an informed choice about what they buy. So, you know, when you talk about the sustainable food system, overall packaging does play a really important role. What is a real issue for us is packaging waste. And so at PepsiCo, our mission is to make sure that, you know, packaging and plastics specifically need never become a waste. So I think it's important to realise the benefits of packaging, but also equally realise that the waste that is being generated from packaging today is a real issue. It's like I said, would be the foremost issue facing our generation today. To leave you know, a better safe or a cleaner planning for future generations. I think that is the problem that we are trying to solve.

Matt Eastland [00:03:11] Yeah, that's wonderful. Thanks for that Archana. I mean, just to back that up, I think we were reading something in National Geographic. They've got a fact about, of the seventy-eight million metric tons of plastic packaging produced globally each year, I think it's only like fourteen percent, which is actually recycled. So, you know, it's a really big, big issue. And what about you, Daphna? What do you think?

Daphna Nissenbaum [00:03:32] Well, first of all, I agree with Archana. The role of packaging is actually to protect the goods, to protect the food and to make sure that we eat safely and consume safely. But while we do that, we've been in the last, I would say sixty or seventy years, using plastic without any conscience. Actually, research that was published at the beginning of two thousand and eighteen by the World Economic Forum shows that even less than fourteen percent is actually recycled worldwide.

Matt Eastland [00:04:04] Is that right?

Daphna Nissenbaum [00:04:05] Yeah, the numbers were around nine percent. And that if we don't do something now, right now, it's going to be way above human race to take care of the damage. The plastic is going to be without us. We all have to understand that every piece of plastic that has been used ever, is still someplace around us, didn't go anywhere. Continue like that, it's going to be a disaster.

Matt Eastland [00:04:35] Yeah, sobering stuff. Thank you.

Lukxmi Balathasan [00:04:38] And obviously, both of you, what do you talk about packaging, we all think about plastic and plastic is obviously just one magic material used for packaging but there are obviously others that we have challenges with. You know, for example, people think glass is better, but in reality it's much heavier. So it costs, more polluting when it comes to transport. And sometimes paper bags can also have a higher carbon emission than plastic when it comes to production. So, you know, there's lots to consider when we talk about this topic of packaging beyond plastic.

Matt Eastland [00:05:05] Yeah, that's right. I mean, it's really obviously not a straightforward topic. So maybe could you both run us through some of the different packaging options available so that we can explain this a bit to our listeners? So, for example, what's the difference between biodegradable, compostable, recyclable, non-recyclable? I'm sure there's loads of others, you know can you, sorry, excuse the pun. Can you unpack these terms for us?

Daphna Nissenbaum [00:05:34] Sure. So there are many terms when we really have to understand what we're talking about. So recyclable, it's a war that says, ok something can be recycled. I think everything can be recycled at the end of the day. But we do have to understand that recyclable means we have to make the connection that recycle means that there is a system to recycle the material. And recycling, I mean, going from the original product back to the original product. It's not recycling from the original product to something else, because that's not really recycling. Recycling is again and again and again and again. And so that's the word recyclable. And I think it's better to use the word recycled because if something is recycled, it means that there was a system to take care of the product and it was actually recycled.

Matt Eastland [00:06:21] Ok.

Daphna Nissenbaum [00:06:21] When we talk about compostable and biodegradable. Biodegradable, let's say it's a phrase that means, almost everything is biodegradable. But the compostable means it biodegrades and decomposes within a certain period of time, a very limited period of time. So when we say something, it's compostable but its certificate is compostable, it means that it can biodegrade and be composed within up to six months.

Lukxmi Balathasan [00:06:49] Great. Thanks very much for unpacking some of these terms for us. So in terms of packaging, the iconic packaging, people are familiar with the Pepsi Cola aluminum can. But for the listeners who aren't familiar with the extent of PepsiCo's different brands and product ranges, Archana perhaps you could explain a few of these areas?

Archana Jagannathan [00:07:08] Yes, absolutely. So people are very familiar, as you said, with the beverage part of PepsiCo's portfolio. But PepsiCo also has a huge food business where we have iconic brands like Lays Doritos, Cheetos etc in many parts of the world. So food is a big part of our business as well. We also have businesses in different parts of the world. So in Europe, we have a big dairy business in many parts of Western Europe, in juice with Tropicana. You know, many people don't know Quaker Oats is owned by PepsiCo as well. So it's really a very wide portfolio which uses a very wide range of packaging materials depending on the need of the product and the requirement from a food safety, as well as packaging perspective to keep that part at ultimately safe and fresh till it reaches the consumer.

Matt Eastland [00:08:03] And Archana, can we just stay with you for a second to just talk about your actual role? So why did you take on the role of Senior Director of Sustainable Packaging at PepsiCo? Which sounds amazing by the way. And what do you see as the opportunity that you have in this role to make a difference?

Archana Jagannathan [00:08:20] I was super excited to take on this role as a Senior Director of Sustainable Packaging for Europe. And it's really to bring to life this mission of PepsiCo that I spoke about earlier, which is to build a real world where packaging may never become a waste right? And if you indulge me for a moment and a personal anecdote. When I was on holiday a few summers ago with my daughter and some plastics swept up on the beach and, you know, she asked me an unending stream of questions about why it was there and how it got there. And you realised at that point that this is a problem that we have to find a solution for. So for me, taking on this role, was personally an opportunity to try and find a solution to this problem. And I think what the scale and reach of PepsiCo offers, is the platform to not just make change happen in our direct operations, but hopefully use our voice as a leader in the food industry to drive change across the entire industry as well. So I'm really hoping that in my role, I can make a difference, not just at PepsiCo, but to the overall industry as well. And, you know, just transform our relationship with packaging and plastics.

Matt Eastland [00:09:45] I love that. Archana.

Lukxmi Balathasan [00:09:48] And turning to you, Daphna. So tell us a little bit about why you set up TIPA.

Daphna Nissenbaum [00:09:53] I mean, it's funny, it's almost the same story as Archana's. By background, I'm a software engineer. I'm coming from a totally different industry, has nothing ahead, nothing to do with plastic or chemistry. But one day I had an argument with one of my kids about the plastic bottles that they used to take to school.

And I said, where's the bottle? And he said, I threw it away. So I said, no way. We have to reuse, recycle and then they actually, I went out to jogging and then I said to myself, okay, there must be another solution. And I thought to myself, what would be the most natural way to pack food? And the first thing I think that came to my mind was an apple, because if I eat an apple and I throw the residuals to the waste bin, it just disintegrates and biodegrades by itself. And that was the inspiration for TIPA to develop a package to be similar to nature creation, to organic waste, and started to investigate that and develop new materials that can actually pack the goods and protect the goods. But at the same time, be fully compostable and can just go to the same stream as organic waste and that's what we do.

Matt Eastland [00:11:02] That's amazing. So both of you were driven to do what you do from your kids, from, you know, from what you were having conversations and debates with your children. It sounds like we probably need to be listening to our kids a bit more.

Daphna Nissenbaum [00:11:16] Yeah, the future is there and we know.

Matt Eastland [00:11:18] Absolutely. So Daphna, just to follow up to say how you developed your products and, you know, what's the innovation and I guess what are the benefits? And can you explain that to our listeners?

Daphna Nissenbaum [00:11:28] Sure. So we had a target to develop a package that is fully compostable, which means if it's one hundred percent compostable, it can go to the organic waste stream. So there was one goal. But on the other hand, we had to develop materials that are also similar to plastic in terms of their properties. There are compostable polymers in the market, but they have limited, very limited properties. So what we did is we developed unique formulas that actually enable us to manufacture films, rolls of films, and from those rolls of films, we manufacture packaging. I have to say that we focus on flexible packaging. I can explain why, but we focus on your soft packages, flexible packaging, things like snacks, fresh produce, bakeries, etc.. The reason that we focus on flexible packaging is because actually, flexible packaging involves few materials in one package, which means that the package cannot be recycled, there is no technology to recycle the package. Therefore we decided to focus on the market where there no sustainable solution post consumption.

Lukxmi Balathasan [00:12:36] And in terms of compostable packaging, you know, you mentioned this technology is not actually new. It's been around for a while. So why do you think it hasn't been adopted faster?

Daphna Nissenbaum [00:12:47] The majority of the technology that has been in the market, I would say, in the last fifteen years lets say. We see compostable. It's mainly disposable plates or knives or forks or utensils and shopping things. Packaging needs different properties in bags. It has to be very robust. It has to go through a very aggressive supply chain and machine ability etc etc. That technology wasn't done. Now the technology now is available. Plus, the awareness in the market, has been raised dramatically since we started TIPA. I mean, plastic is a major discussion, I think, since 2017 when China decided to stop accepting plastic waste from all over the world. That's one. And I'm glad to say that at the same time, we were ready with the technology.

Lukxmi Balathasan [00:13:38] I was going to say know in terms of, you know, the brands known for the brands, what makes ideal packaging, like what are some key considerations that brands such as PepsiCo need to consider?

Archana Jagannathan [00:13:49] Yeah, that's a great question. I mean, apart from what I talked about earlier in terms of food safety, food waste, ability to travel, etc right? When we think about the environment, when we would think about, you know, the environmental outcomes of a specific kind of packaging, we would absolutely think about infrastructure. So I totally agree with Daphna, we need to think about whether the packaging is actually recycled versus it just being recyclable. But also, we think about the ease and convenience for the consumer. How is the consumer actually going to dispose off this packaging? And I think where we are on this is one size doesn't fit all. We will have different solutions in different markets.

Matt Eastland [00:14:33] Great and maybe you can just, just for our listeners, just give us a bit more flavour of what types of packaging projects PepsiCo are working on right now.

Archana Jagannathan [00:14:44] We normally think of this agenda in three parts, right? It's reducing the amount of packaging and plastic that we use to the to the minimum required. It's recycling. So creating that circular economy and it's reinventing. So completely rethinking the business models or the types of packaging that we use for our product. And now I'll try and give you a little bit of a flavour of some of the things that we're doing on each of these. So on the reduced side, we're looking at, you know, obviously doing things like light weighting our beverage bottles, reducing the size of our crisp bags. We're looking at really innovative technology that that helps settle the crisp's in the bag a little bit better and so you can reduce the size of your bags. And we've actually compacted our large multi packs in the U.K. by thirty percent, for instance. So that does save quite a lot of packaging. So we're really looking to use the bare minimum required to keep our product safe. On the recycled side, we've committed to making our entire portfolio a hundred percent recyclable, compostable and biodegradable by 2025, we're about ninety percent there now and we're running several projects to help us bridge the gap across the board. We're also working with people across the value chain. So we're working with CARBIOS, which is a French company that uses enzymes to recycle product. We're working with LOOP that uses chemical recycling technology. But equally, I mean, we're also going upstream. We're thinking about sorting technologies within, you know I can go onwards with several examples of the sort. But I think what's important to mention on the recycling side is we're also very closely working with the packaging recovery organisations in different parts of Europe to ensure that packaging is actually collected and we push up the collection rates and the consumer education on how to correctly dispose packaging. We're working with a CITEO in France, Eco Ember's in Spain, etc. So a lot of work on really developing that circular economy for all of our different types of packaging, whether it's aluminium or flexible packaging. And then on the reinvent side, you know, really thinking about reshaping our business model. We bought SodaStream a couple of years ago.

Matt Eastland [00:17:18] I saw that.

Archana Jagannathan [00:17:19] And we are super excited about the potential of that business to expand. And we think it will avoid about sixty seven billion plastic bottles from the expansion of that business. So that's something that we're continuing to drive very hard. And it gives consumers an alternate choice for how to consume our beverages. Also, like I said, looking at different types of packaging. So I did mention the work we're doing on compostable packaging. But on the beverage side, we're also looking at a fully bio based bottle that is actually produced using old cardboard and sawdust. So biomass makes material and that's working as part of an alliance with our peers, with a California based

Start-Up called Origin. So, again, lots of projects going on across all of these three pillars reduce, recycle and reinvent and across our different types of packaging in different parts of the world. But hopefully I was able to give you a little bit of a flavour of some of the things that we're trying to do.

Matt Eastland [00:18:30] Yeah, that's brilliant. Thanks for that. It's great to know that you're taking this so seriously and that TIPA does as well. And actually, just full disclosure, it was my birthday on Friday and I actually got my first SodaStream that I've seen since the 80s.

Archana Jagannathan [00:18:43] Great! I'm so glad to hear that.

Matt Eastland [00:18:43] So can't wait to start gassing that water.

Lukxmi Balathasan [00:18:47] Oh, I'm really jealous of that, it's like my dream to have a SodaStream.

Matt Eastland [00:18:52] Yeah, well, I love the sparkling water, what can I say? I mean, you talk about the sort of you know, what you're both doing. But I guess whose responsibility do you think it is to tackle sustainable packaging? Is it just, you know, from corporate start ups or is this a wider responsibility? Is this governments and other players in the food system as well?

Daphna Nissenbaum [00:19:13] So I think it's not just to one angle to look at responsibility. I think it's throughout, its all the stakeholders that actually use, produce and use packaging. Of course, I believe that revolution starts from end consumers. Where they see and feel the need and then it pushes brands to take steps. And then in order to drive new technologies, start-ups have to come with innovation. And at the end of this process, governments come in. Then they take regulatory steps. Now, when you look at the future, not everything is in place at the moment that you look at it. But eventually, I think that right solutions win throughout history. And that's the responsibility of companies that have a huge power in the market. So here we are, PepsiCo and TIPA. Well, those two edges off of brands in the market ok? So we are very small and PepsiCo, maybe it's the biggest company in the world, and still are in the same discussion because something has to be done here. And I think that the best story is the story of Henry Ford with the first car that was launched in the market one hundred years ago or more, and that there weren't any roads then. And still, we know to work towards the right technology and what works today.

Lukxmi Balathasan [00:20:38] What's your take on it Archana? In terms of responsibility, like working alongside with start-ups who drive the way?

Archana Jagannathan [00:20:46] No, I fully agree with what Daphna says right? It's one person alone cannot solve this challenge. The scale of the challenge is so huge that it requires multiple people, whether it's governments, start ups, big companies, to come together to solve the problem. So, you know, we're looking at this in terms of collaborations with start-ups, but also collaboration's with our PR companies, collaboration with the government etc. The only build to what Daphna said is, you know, as a responsible company, we don't want to wait for consumers to ask us to do something, we want to be on the front foot. And we want to, we want to lead because we realise that we need to find a solution to the problem as well. So collaborations, partnerships is an absolutely key part of our plan. We can't solve it alone. We need partners to help.

Lukxmi Balathasan [00:21:40] And in terms of partners. So, Daphna, what companies are currently using TIPA products? Who are you working with?

Daphna Nissenbaum [00:21:48] Many, I'll mention a few names in a second. I just want to say the way I really believe the right model is the mother of collaboration. You know, I said I'm coming from the software industry. And I know what viral growth is and that's what I drive the company TIPA to do viral growth. Actually, the growth model is a model of collaborations with manufacturers, with raw materials companies and with brands and converters and other type of companies. And that's what we've been doing. We developed the technology we manufacture with third parties. In a sense, we're using an existing supply chain with no machinery. That's how we grow. We focus on several markets, which are the U.K., France and the Netherlands and Benelux, Australia and the US. We work with companies like Waitrose in the UK, we work with Stella McCartney. We work with NET-A-PORTER in the fashion industry as well.

Matt Eastland [00:22:50] Amazing.

Daphna Nissenbaum [00:22:50] We're very large, a variety of companies and we also pilot with a lot of companies. The demand is there.

Lukxmi Balathasan [00:22:57] You talked about, you know, your brands are being your consumers. But I guess for brands, your consumers, the end users like me and you like what do you think that the role that we can play in reducing our plastic packaging footprint in terms of our buying habits?

Daphna Nissenbaum [00:23:12] It's a great question. And, you know, and I've been asked this question so many times, and every time I talk about TIPA and people are connected to the idea immediately and they say, OK, what can we do in order to help you, to help you grow? Because we think you're on the right way. And I said to consumers, you know, go to the brand and just ask, why are you still using plastic? I think that's a question that needs to be asked by everyone. Why are you still using plastic that, you know, that is not going anywhere? Just not going anywhere. And it's actually destroying the world we have been living in. And that's the immediate role of end consumers. I can gladly say that people actually do that. And people actually connect brands and say, why are you still using plastic? And I can also share that's one of the biggest companies in Europe came to us before covid, came to Israel, to our offices and sat here and said we're not launching this and this product because we cannot package with plastic, please find the solution for us. And that was a very, very good flag for me. Which means that the pressure is there. Maybe it's not in full capacity, that's for sure. I mean, there's still way to go, but it starts to be there.

Archana Jagannathan [00:24:27] Can I just build on that Lukxmi?

Lukxmi Balathasan [00:24:30] Absolutely.

Archana Jagannathan [00:24:30] You know, I do think consumers have a really important role to play. However, I think we need to look at it from a sort of nuanced perspective, as you alluded to earlier right? It's not plastic per se that's a problem, it's plastic waste. That's the problem. So in beverages, for instance, PET that's the material used for beverages is already widely recycled. We are using a lot of recycled content in our packaging and to pick up on the point that Daphna made. It is more expensive than using virgin plastic in our beverage bottles, but we still believe it's the right thing to do and we're doing it. And we've

introduced a hundred percent recycled PET bottle in Tropicana. We've introduced it in Lipton Iced Tea and we're well on that journey to doing that. So, you know, we believe it's important as long as you can, you know, recycle and reuse that material in the circular economy.

Archana Jagannathan [00:25:30] And it's great Archana to hear you talk about some of the innovations in PepsiCo you're already working on. I mean, what from your position, what's the thing that you're most excited about? Is there something that you've seen that really, you know, really sort of gets you really excited about what you do when something where you see that it's going to make real change?

Archana Jagannathan [00:25:52] So I think I'm most excited about the future, for flexible packaging and trying to develop that right? So, as I said, you know, the circular economy for PET, aluminium, glass, as Daphna referred to earlier as well, is reasonably well developed. There is infrastructure to do that today. The biggest problem we're trying to solve is, you know, the end of life for our flexible packaging. So I'm really excited by the work that we're doing in Europe to develop recycling infrastructure for flexibles. I've been to a couple of recycling facilities that actually take our crisp bags and recycle them and create, you know, various different products, including sort of car bumpers ect out of that. So they're being reused and being given a second life. I'm really excited. It's very small pockets of Germany and Netherlands where that's happening today. But we're doing a lot of work to work with governments to try and scale up that infrastructure in Europe. But equally, the second prong of it is the work that we're doing on compostable and biodegradable firms in some other parts of the world. So we're learning and that's what I'm really excited to be working on with my colleagues from different parts of the world.

Matt Eastland [00:27:07] I wanted to pick up on something you said a little bit earlier. You talked about making it easy for consumers. And I'm really glad you brought that up, because we often talk about on the podcast and we know with our colleagues and consumers about labelling. So I imagine there's a lot of consumers out there, myself included really. You think you're doing the right thing. So, you know, a piece of packaged food, you buy it, you know, let's say it's an avocado. You take off the plastic wrapper, you put it in the recycling because you think you're doing the right thing. But a lot of the time, it's not actually recyclable. So should the labels be clearer on food packaging and can't we just make this really easy for consumers? So, for example, could you imagine a world where we just have a label that says recyclable, compostable, not recyclable or something like that? You know, you're just three easy choices. Why is it so hard?

Archana Jagannathan [00:28:04] It is. And, you know, to add to what you said right? The labelling system in different countries is totally different.

Matt Eastland [00:28:11] Right.

Archana Jagannathan [00:28:11] So if you live in London and you suddenly go to Paris, you have to relearn the whole labelling system there.

Matt Eastland [00:28:18] Alright, I'm staying where I am.

Archana Jagannathan [00:28:18] It is complicated. And I think there's definitely an opportunity working with the regulators in different markets and sort of making sure that, again, we're doing the responsible thing by putting the right information on our packaging as well. So we're introducing, for instance, and rolling out across all of our beverage

packaging, very simple messaging on the cap that says please recycle me. And then, you know, it nudges consumers to say, you know, once you've finished drinking this bottle, please put it in the recycle bin. So I think as brands, we have the power to drive a lot of consumer behaviour by doing the simple things like labelling, but also through any of our events that we ran right? So, you know, we work with the UEFA Champions League in Madrid last year and we ran a recycling activation where, you know, we encourage consumers to recycle and they could use the empty bottles to vote for their favourite team. But it's, you know, one of the small things that we can do to really ingrain the habit of recycling in the minds of the consumers and try and explain to them why this is so important. We see that as part of our role for sure.

Matt Eastland [00:29:32] Okay, that's great. And Daphna, just on the labelling point, I mean, do you think that we can do better or actually is labelling just a small part of the issue?

Daphna Nissenbaum [00:29:41] No, I think labelling is crucial too, for then consumers to understand what they need to do. I think it has to be very clear. I mean, two or three options and that's it. And we cannot to confuse the consumers anyway it's confusing. But there's a lot of work that has to be done.

Lukxmi Balathasan [00:30:00] And Archana coming back to you. So in a company like PepsiCo like, how do you balance responsibility with profitability? And what does that mean for PepsiCo and what does that look like?

Archana Jagannathan [00:30:14] I don't see these as mutually exclusive. You know, as a consumer centric company, we do what the consumer demands and the consumer is demanding more sustainable products today. That is only going to increase going forward. So this is as much about future proofing our business as anything else. We need to have a licence to operate and we need to deliver to our consumers what they are asking for in order to actually drive growth and profitability as a company. So I don't think we actually have an option here. We have to do it. And we realise we have to do it.

Lukxmi Balathasan [00:30:54] And same to you Daphna with TIPA. You know, obviously, sustainability is the heart of your business. But in terms of your long term growth strategy, like how do you see balancing responsibility and profitability?

Daphna Nissenbaum [00:31:07] So, of course, as a start-up, it's a different story. Currently, we're backed by investors, but we've been growing very fast since we started sales and eventually our plan as we open subsidiaries around the world is to grow, grow our revenue, of course, and continuously grow by providing more and more solutions in the space of compostable solutions, possible packaging solutions. I am very you know, I'm very pleased to say that, like lately, we raised our last funds for the company's growth. There was the purpose of the last round and we raised more than we planned because the demand with investors, which actually reflects from other demands, was huge. And we had to stop the fund raising currently and we'll go back to that when we need more funds.

Matt Eastland [00:31:56] Congratulations.

Daphna Nissenbaum [00:31:59] Thank you. Thank you. Because that's our growth strategy. Grow the company by more customers around the world and more and more partnerships, of course.

Lukxmi Balathanan [00:32:10] And making compostable plastic, flexible materials the norm.

Matt Eastland [00:32:14] Yeah. Thank you for that, Daphna. I'm really sorry to say and I actually really mean this because I'm thoroughly enjoying this conversation. We're really very nearly out of time. So if I could ask both of you as one of the final questions, if you could send a message to the rest of the food industry, what would you urge them to adopt? Or maybe another way, what would you want people to get inspired to do over the next few years to sort of really drive this agenda forwards?

Daphna Nissenbaum [00:32:42] Thank you for the question. First, I think it's very important one, because I believe that when coming to solve a problem, it cannot be solved with the same solutions that we use now. What I learnt in my short history, but when I look at history, problems were changed when people started to think differently. Whenever the stage to talk to brands or end consumers and governments, I always say, open your minds to innovation. Because eventually innovation had and can change the world. And when I talked today, today to PepsiCo or to other companies around the world, I say, ok you don't have to go all the way. Let's start adopting innovation. Start to look at innovation. Start using new materials. And that will drive a change eventually. And that's our role here eventually to leave a better world behind us. That's where we have to do. Let's do it with innovation. And even to governments, you know, governments which are very conservative, usually. I say you have to open your minds and systems to encourage innovation into existing, existing very strong systems. The plastic industry is so strong. It's like David and Goliath in this story ok? It's so strong. But if you open your mind to innovation, they can make a change for everyone, to the benefit of everyone.

Matt Eastland [00:34:08] Fighting for a better food future. I love it. And Archana, what about you?

Archana Jagannathan [00:34:13] Yeah, well, you can not fight for a better food future, right? So within the same theme, I think my message would be collaborate. None of us can solve this problem on our own. We've had successes as PepsiCo, collaborating with start-ups, collaborating with peers, collaborating with government. And we just want more people to come to the table to have that conversation. We are more than willing to play our part in driving this. I think we're just inviting everyone to the table to say let's work together to find a solution to this.

Matt Eastland [00:34:49] Amazing.

Lukxmi Balathanan [00:34:49] So it's been really great talking to both today so thanks very much. So for our listeners, where can people find out more? So, Daphna, where can people find out more about TIPA and a bit more about you?

Daphna Nissenbaum [00:35:01] First of all, you can Google TIPA. Our website is tipa-corp.com. I want to say something about our name TIPA. TIPA in Hebrew means a drop, let's say a water drop. And the meaning that and the reason that we chose to word drop is because one drop cannot make a change, but a drop and another drop and another drop and another drop can actually even change a rock and the surface of a rock. So that's why we chose this name TIPA so maybe there's a way to remember our name. You just write it, the same way you hear it, T I P A - C O R P.com. That's who we are. You can take a look at our products. You're welcome to approach us. Welcome everyone to do that.

Lukxmi Balathasan [00:35:55] Brilliant thank you. And you Archana, where people find out more about PepsiCo and your packaging and your sustainability?

Archana Jagannathan [00:36:02] Our corporate website is the best place to start. We've just launched our sustainability report a couple of weeks ago, and that has a lot of the information on things that we've done, but also things that we're planning to do. So that would be a great place to start. But, you know, equally personally, I'm accessible on LinkedIn and all of the normal forums. So I always invite anyone with any interesting ideas in this space to connect.

Matt Eastland [00:36:28] Amazing.

Lukxmi Balathasan [00:36:28] Brilliant. Thanks very much.

Matt Eastland [00:36:30] Thank you very much. Both of you so Daphna and Archana thanks so much for your time. Another fascinating conversation. So to all the listeners out there, let's keep fighting for a better food future. So thank you all. And goodbye.

Daphna Nissenbaum [00:36:43] Thank you very much.

Archana Jagannathan [00:36:43] Thank you. Thank you both. Matt and Lukxmi.