



Episode 4:

Reducing food waste

[00:00:00] **Voiceover:** You're listening to the Fáilte Ireland's Inside Tourism Business podcast. The definitive podcast for tourism operators, bringing you expert advice, insights and practical tools to help you navigate the challenges your business is facing.

[00:00:20] **Ruth Hegarty:** My name is Ruth Hegarty and I'm your host for the first series of Fáilte Ireland's new podcast, where we delve inside food, examining trends, innovations and tackling costs to help you run a leaner more successful food operation.

[00:00:39] Welcome back to Fáilte Ireland's Inside Tourism Business podcast. In episode four of our inside food series, we discussed the topic of food waste. I'm delighted to be joined once again by chef and food consultant Niall Hill of Niall Hill foods and with us today is Maurice McGeehan performance chef with the IRFU.

[00:00:57] Hi guys thanks for coming on.

[00:00:58] **Niall Hill:** Hi Ruth, hi Maurice.

[00:01:00] **Maurice McGeehan:** Hi guys.

[00:01:01] **Ruth Hegarty:** So, in our last episode, we took a detailed look at managing food costs, but of course if you're going to properly manage costs in any area of business, we really have to consider wastage where it may be occurring and how it's possible to eliminate it. So today we're going to focus in detail on food waste, examine where it's happening and how it can be avoided.

[00:01:22] An estimated 30% of food produced globally is wasted along the food chain, which all contributes to environmental impacts through its production and disposal. So, there's an environmental imperative, but of course food waste is also bad for business, you pay for it twice when you purchase it and when you dispose of it, in fact three times if you consider labour time that's involved in prepping it.

[00:01:46] And the EPA has done some quite detailed research on food waste in the Irish food service industry. So, we'll discuss some of the stats from that as well as we go through the discussion. So, Niall, I suppose just to set the scene, what do we mean by food waste? Where does it occur in food service businesses?

[00:02:04] **Niall Hill:** First of all, Ruth, I guess we have to have a look at, you know how this is impacting our business and what it's costing us. With the EPA stats, you know they're saying that the Irish food service sector is producing 150,000 tons of waste per year and that's an incredible amount of waste, you know and you're right in what you're saying, you know from a global point of view a third of all, food for human consumption is wasted.

[00:02:25] So this is really incredible, so when we have a look at how is this occurring? It really starts at every stage from the backdoor right through to service and when you have a look at trying to categorize this and trying to understand where the food waste is coming from, the EPA break this down into three different categories which is, unserved food waste, which is food that spoiled, due to over purchasing or poor stock rotation.

[00:02:46] And this is also linked back to, you know your recipe development scaling up right. So that accounts for 27% of all food wasted in Irish kitchens. Then we have a look at preparation waste, and this is really consisting of your trimmings. Now I know Maurice doesn't consider this a waste with his trimmings, but this accounts for 35%.

[00:03:03] So this is an incredible stat that where possibly there could be huge improvement. But what was most interesting was the plate waste. So, this is really saying that you're over portioning, you're serving too much food, and this accounts for an incredible 38% of all food wasted in kitchens.

[00:03:20] I find this really incredible, but what it does is it allows us to analyse the waste of where it's coming from and it allows us to be proactive and really kind of dive in deep into it and have a look at how we can prevent this waste and reduce this cost.

[00:03:32] **Ruth Hegarty:** Okay and I suppose just briefly in terms of where all of that waste that is occurring currently ends up – what happens to all of that waste?

[00:03:42] **Niall Hill:** It ends up costing you money, that is the bottom line. When you have a look at it every time you waste food it has a cost impact, it's costing you money. But it's also costing you money in energy as well in labour hours. So, it's a huge cost to a business and I always say that you know a waste cost is one of those variable costs.

[00:03:58] So it's at a cost that you have control over, or you can try and manage as best you can. So, when we have a look at, from a cost point of view, it's costing, and these figures are from the EPA, it's costing €3.38 for every kilo of waste that is produced in the kitchen - this is incredible.

[00:04:15] This is based on per cover, so for every cover you do it's costing you €3.38. And what's interesting as well, you know for every cover you're also 380 grams of wastage per cover as well, so that is incredible. So, when you break this down, it's broken down into unavoidable waste and avoidable waste.

[00:04:32] So your avoidable waste is 64% of that make up. So that's incredible, so you're really just throwing money down the bin really. The unavoidable which would be kind of classed as trimmings as it makes up for 38%. So, but you know there's ways in how you can really kind of have a look at this and manage this from a cost perspective, but also from a sustainability side of it as well.

[00:04:52] **Ruth Hegarty:** Okay and Maurice, as Niall said of the waste 35% of it is classified as preparation waste and in the EPA report, they say about 25% overall of waste is an unavoidable part of that preparation waste, is that how you would classify it?

[00:05:10] **Maurice McGeehan:** Actually, no not at all I always like to look at my waste bowl from a mise en place section is a bowl of ingredients.

[00:05:17] You just need to kind of look at it in a different way, don't look at them as peelings and as by products - just look at them in the same way as you would look at any other ingredient to use, you know

most kitchens always have a load of cauliflower leaves, broccoli stocks, carrot peelings, you know and there's nothing really complicated about how you can use them.

[00:05:33] If they're in good enough condition, if they're fresh enough you can cut them up. You can use the leaves as stir fries, I do a lot of fermenting in my kitchen, so I make a lot of lacto-fermented sauerkraut kimchi's as well. Just the other day there we just done a load of fresh cauliflower leaves and you can be creative with it as well.

[00:05:49] Mix some flavours up then we just put some smoked paprika, some fennel in it and 2% salt and that was it and leave it for two weeks and you get delicious component, nutritious component for a salad bar or part of a starter dish or whatever else you may use it for as an accompaniment. I also look at the techniques.

[00:06:04] When we're cutting things like cauliflower, broccoli, you know like you can, if you'd look at your technique you can incorporate a lot of the leaf and a lot of the stocks into your actual florets, when you cut them and that goes for broccoli as well. Broccoli, we can cut them into batons, you can peel the stocks, cut them chunky for roast veg, you can slice in thin browns, you can pickle them to make lovely garnishes.

[00:06:26] I do a papaya salad at work a lot but it's not actually papaya, I actually use stocks from the broccoli, I peel them, I cut them into matchsticks, shred them with a mandolin and then continued with the papaya salad recipe the exact same way.

[00:06:38] And when you put the salt and soy sauce or fish sauce into it, when it breaks down and it's very hard to see the difference between that and an unripe green papaya. Other trimmings, you know like meats. if you're breaking down a rack of lamb, you do have a lot of meat in between those layers of fat.

[00:06:52] You know you should keep those and dry cure them - make lamb bacon out of them. Other things like from a raw prep side would be like, if you had a lot of chicken bones from your boning or after roasting, they're great for stocks. Like even just the other day, I done, Peking duck pancakes and I had all these lovely duck bones left over and I made a lovely stock.

[00:07:09] And they made an absolute awesome hot and sour soup the next day with that, you know, and this is using every part of that dish and even had some duck fat left over for some nice roast potatoes, as well coming from that. But also, as well on top of that, we do have in the avoidable waste section, you know you do have food that's not being used. I know every place is different in the corporate catering or contract catering you have the hotline at 2 o'clock or half 2, whatever time your service is over. You've always got food sitting there and you always kind of look well what to do with this? Like some of it might be still very good to use.

[00:07:42] Like and you might have some simple stuff like some tagliatelle's leftover, you can do some simple stuff like crispen that up. With some olive oil or other rapeseed oil, add some seasonings into it, you slow cook it in the oven 140 degrees for two hours, and you get these lovely shards of crispy pasta that can be used for snack components or even for some dips.

[00:08:01] Even the likes of some roasted carrots left over from your service as well they can be going into a blender, a high-speed blender for a nice smooth consistency, where you can make it a little bit of carrot tahini out of that.

[00:08:12] **Ruth Hegarty:** Wow there's just so much inspiration and so many ideas there, I think chefs' brains will be really, really getting going with all of those kind of ideas and really thinking about where you can, I suppose, avoid, you know it's that idea of by-product cooking isn't it, where, you know things that were perhaps wasted in the past, it's about just kind of taking, as you said, taking a new approach and looking at things differently.

[00:08:36] And briefly, are there places where you would recommend chefs to go for inspiration on those ideas around kind of by-product cooking and I suppose zero waste cooking?

[00:08:46] **Maurice McGeehan:** I suppose I went to Amass a few years ago and I found Amass to be a very inspiring place where, it's funny enough there's a few things we've done the same, but they were doing so much more than I was doing and then I kind of looked at it and go, well, like this just breaks the constraints.

[00:08:59] Like there's no, there's no limits to this just push the boundary and see what can you make with this? Like and making like a Nori type sheet out of kale stocks with the little bit of Xanthan Gum and there was very little difference between that, and Nori paste and that just gets you thinking, like, how far can I go with this?

[00:09:15] You know how far can we all go with this?

[00:09:18] **Ruth Hegarty:** So maybe check out Matt Orlando in Amass for some inspiration on his social media platforms. And I know you on your own Twitter – is it Twitter or Instagram?

[00:09:27] **Maurice McGeehan:** Instagram and Twitter yeah, so every week I put up loads of different kind of posts to show what to do with things that would normally go into the bin.

[00:09:33] And it's just really tend to get people to really open their eyes and say well okay this is actually not a trimming; this is actually a really tasty ingredient that can be used for many different things.

[00:09:43] **Ruth Hegarty:** Brilliant, so Niall, I mean, listening to all of that makes me think about, you know traditional kind of dish costing formulas, where you would have your margin for food waste.

[00:09:53] So that's something that should be included in costings as a given, should people incorporate that margin automatically?

[00:10:00] **Niall Hill:** I think we just see happening in most establishments Ruth is that they put in a 4% waste cost into their recipe costing. Now grand, I think it's okay to do that, it is a safety network, but it's not really tackling the real issue and identifying where your waste is coming from and as Maurice said, you know he doesn't look at trimmings as waste - it's an ingredient. But every time you throw something in the bin, it automatically increases your food costs.

[00:10:22] So you take say a carrot, a kilo of carrots and it's costing you a euro a kilo by the time you peel them, you throw out that peel now it's costing you – and you're losing say 30% – it's costing you €1.30. So, the key is to really kind of turn your leftover into a turnover and really get value for money of every single ounce of that ingredient that you're using.

[00:10:41] You know what's worked for me, you know Maurice will probably, touch on this as well is I've done a lot of new product development, but we've had new product development days around by-products. and they've been probably the most creative days we've actually ever done in kitchens.

[00:10:54] So you take, for instance you know ingredients that are really difficult to use, like onion skins and I know, you know you can dehydrate them, and you can turn them into a powder, and these are really great for flavouring breads as well, so you want an onion bread it's really great way and using it up.

[00:11:07] I've also made teas out of it, like an onion tea and looking from a health point of view as well and that's from a nutrition cause it's full of flavonoids and antioxidants, so which is fantastic for your health as well.

[00:11:17] So I think I'm really understanding that you know the 4% is okay to add in and that's the industry standard, but really, it's a kind of safety network and, you know you don't want to get your chefs to be complacent about the food waste and having that attitude of well, you know the waste is already costed in there, so I'm not really going to investigate it. It should be investigated because, you know it's one of those variable costs as I said and then you really need to maximize your profits.

[00:11:40] **Ruth Hegarty:** Okay we'll be right back to the conversation after a short break.

[00:11:45] **Niall Hill:** Fáilte Ireland's new breakfast toolkit contains expert advice and practical tools that are applicable to all areas of food and service.

[00:11:53] You can find the breakfast toolkit and more helpful supports and guidance on the operational performance section under Strategic F&B Operations on our COVID-19 business support hub at [Fáilte ireland.ie](https://www.failteireland.ie)

[00:12:05] **Ruth Hegarty:** So, we've talked a bit about avoiding prep waste or using, finding ways to use up the trimmings and what might be classified sometimes as the unavoidable waste involved in preparation of food.

[00:12:18] And we talked a little bit about what Maurice talked about in terms of food that's been cooked but hasn't been used and how those leftovers can be incorporated into dishes and menus. But Niall what about, I suppose the rest of the chain from, you know you're purchasing right through to the end, in terms of, you know your servings to your customers and plate waste.

[00:12:40] I suppose those two ends, what are the kind of key things to think about in terms of avoiding waste all the way through the process?

[00:12:47] **Niall Hill:** For me, I keep on reverting back to the HACCP system and the HACCP system was created really for around food safety. But you know, but what I love about it is the critical control points that are in it.

[00:12:57] And I always tackle something and investigate something in that light, so I have a look at every stage, so from your ordering, are you ordering right? You know, are you ordering the right amounts? Are the recipes scaling up? So, you know so you don't want spoilage so that's one area that you can really try and avoid by ordering smarter from your supplier and storage as well.

[00:13:16] Like is the product being stored, right? Is it being left at the back door for two hours before it's going into a refrigerator or freezer? You know this all has effects on the quality of the product and also the shelf life. Then, you know if then it goes into your prep, you know are you over prepping?

[00:13:30] And is that product not being used? Is it is a spoiling and is it ending up in the bin? And then, you know when you go up, when you have a look at your plate waste and your portioning, you know really what you need to be doing is, is standardizing your recipes and have an SOP for everything, you know having portion control in there.

[00:13:45] But also having a measure in there that measures that and that making sure that you're getting the proper yields, but you know an easy way to tackle this is to really kind of you know do an experiment and weigh your waste, you know set it up on your bench. Have a look at your trimming waste, your unavoidable waste and also your plate waste and measure what's actually coming back and seeing where the issues are and tackling it, from that point of view,

[00:14:06] **Maurice McGeehan:** But also, Niall I think that food waste can be tackled before the food gets to your door as well like, and over the past, I've had relationships with my producers and suppliers that if they have an excess amount produced and they can't get rid of it we always kind of worked together to get a deal on it.

[00:14:22] **Niall Hill:** Yeah.

[00:14:22] **Maurice McGeehan:** Now there's two benefits of that, there's a benefit to the farm that's growing for me. It's better for them that don't have to throw that fresh produce into the compost heap to do the next harvest. But they get a little bit of money for it – I got a good product at a reduced price for it as well.

[00:14:36] Doing it like that, you know I think it's a great relationship because you need to build up really good relationships with your producers and suppliers.

[00:14:42] **Niall Hill:** For sure.

[00:14:43] **Maurice McGeehan:** You need to bring them in, you need to go out and visit what they're doing, you need to get an understanding of what they're about and they need to go to understanding what you're about too.

[00:14:51] And together when I find when you do work with your producers, suppliers, you do come up with ways together to innovate and wouldn't have been done if you actually didn't make that connection.

[00:15:01] **Niall Hill:** Yeah, that's true, I think a key point there Maurice is having the flexibility of being able to change your menu and being able to run specials.

[00:15:08] I think that's probably key as well that your menu doesn't maybe go off to print and that it's done in house.

[00:15:14] **Maurice McGeehan:** Absolutely and that was leading on to the next point was flexibility on your main menu and specials as well is crucial for this to have that flexibility that okay my fish suppliers got like a lot of haddock, you know, and this is a perishable product it has to be used today or tomorrow. You can bring that in and put something on to get that used up as well.

[00:15:34] **Niall Hill:** Yeah, for sure.

[00:15:35] **Ruth Hegarty:** Maurice are there other ways or other tips that you would give around how you plan and design menus that can really drive towards reducing waste?

[00:15:43] **Maurice McGeehan:** Yeah, I mean like for me, I think if you keep it seasonal and you keep those seasonal ingredients products in the kitchen and you use them in a number of different dishes that way if one dish isn't selling, you have another dish there to use it up. I think in the labour side of things, as well is like, you can't add more work onto something that's already busy that you're doing so you need to look at a dish and think, well, okay.

[00:16:03] If I take for example the papaya salad, for example or maybe the sauerkraut, the cauliflower leaves and the papaya salad made with the broccoli like you can't do that additionally on top of what you're doing already. So, you need to look at well, can I incorporate this? I know I'm going to get broccoli in for my veg, but what will I do with the stalks.

[00:16:20] But yet again I have a starter on that, I could use the papaya salad in you know maybe with like a Thai-style prawns or whatever, actually King prawns grilled I put through it, the sauerkraut could be a component as well or a salad. So, you start looking at ways where you can filter all these by-products or additional ingredients that you could call them into, into various dishes in the menu.

[00:16:40] **Ruth Hegarty:** Okay so it really is having that very holistic thinking of using every part of the product that you're bringing in and incorporating that into your planning, rather than it ever becoming a by-product and something that you're trying to use and then maybe you're making a pickle and putting it on a shelf, but not having a dish to put it into.

[00:16:57] **Maurice McGeehan:** Yeah, it's very good for the theatre, but I think for customer if you're trying to talk to the customer about what you're doing and what your ethos is with the food and they see it, it creates a point of conversation, but why are you doing that? What's the reason you're doing that? It looks great.

[00:17:09] And it's actually going to really taste great, so when they come back again, two weeks later when that pickled, they'll know that this is something that would have went into the bin and they'll know that it's something that's actually nutritional and it's really delicious as well.

[00:17:22] **Ruth Hegarty:** And how important is it to have that kind of customer buy-in in what you're doing? Do you think it's important for the industry to start communicating these efforts to their customers and finding a way to kind of talk to their customers around efforts on food waste and other kinds of sustainability measures that they're taking?

[00:17:39] **Maurice McGeehan:** Yeah, I mean, I think it's absolutely crucial, consequence of customer satisfaction is food waste, you know and something that needs to change. The customer needs to understand that changing in everything is needed now at the moment with what's happening with climate change, you know we need to be more sustainable in every part of our lives. And one of the main parts for me is our food, it's the miles travelled. You know and I think we really need to make the customer aware of like, what are the statistics behind all this?

[00:18:06] Like how much greenhouse gas emissions is food production causing? And the answer to that is 26% and 24% of that is down to food waste, and then 90% of that is down to plate wastes from customers themselves and retailers. So, when they start kind of putting everything together and realise how much waste is going on.

[00:18:25] They will be conscious going forward of what, what they're eating, they will be conscious of how much they're eating and they will be conscious of what they're wasting as well, both in restaurants and at home.

[00:18:36] **Ruth Hegarty:** Great and Niall what about your chefs, your team? I mean you mentioned earlier, you don't, you know you don't want your team to become complacent around kind of making an assumption that there's going to be a certain degree of food waste. How important is it to get the whole team on board with waste reduction?

[00:18:50] **Niall Hill:** Yeah, to be honest with you Ruth, it's absolutely critical you have to get the buy-in from your team of what your goals are, what your targets are and, you know what your ethos of your restaurant or your company is.

[00:19:00] I found for myself personally, one way was to have a look at our waste on a monthly basis and have targets of reducing that waste. But also driving incentives within the kitchen. So, you know it wasn't in money terms, but it was more like you know, the guys in the kitchen wanted a new toy, so they wanted a new Thermomix.

[00:19:14] So I said, okay, you know let's reduce our costs and I'll buy that Thermomix, you know so there's a tangible result at the end. So, it was a win-win situation, so I'm reducing my waste, but the guys in the kitchen are getting new toys to play with. And that also drives innovation and creativity as well.

[00:19:29] And it really kind of gets the buy in and you know it's not one person's job it's everyone's job to do this, but I think it's critical to get your whole team on board of what you're trying to do.

[00:19:41] **Ruth Hegarty:** Okay Niall what about technology? Is there a role for technology in terms of monitoring food waste?

[00:19:47] **Niall Hill:** Yeah, I believe there is a role. There's a lot of different companies out there. I was recently talking to an Irish start-up last week Positive Carbon and they've developed this scales; it takes a camera of your food of your food waste, that goes up into the cloud. What they have done is they've actually gone into kitchens and find out where the issues are, what's the barriers in, in recording this?

[00:20:06] So the chefs don't have to put in what the ingredients are, basically takes a photograph of it and it's analysed on the cloud and sends you back that data. And now I guess the most important part is what you do with that information and how you proactive in using that.

[00:20:19] But you know it shouldn't prohibit you in reducing your waste and you can do this manually; you can just put containers on your table and record your different types of waste on a daily basis to analyse everything.

[00:20:29] But I reckon it does have a role to play in it and larger companies are starting to have a look at it or using it as a strategic model of reducing the waste, some of these companies are claiming that it can reduce up to 50%

[00:20:42] **Ruth Hegarty:** Maurice do you think it's a requirement, do you think people need to kind of have that technology in place?

[00:20:47] **Maurice McGeehan:** I think they need to be making a conscious effort at some degree whether or not it's getting the technology like that in it's up to the operation really. If you're a large operation, you're doing a lot of food every day, then I think this is very much applicable, but if you're a small place, small cafe or small restaurants from the streets, you know maybe 40 covers. It mightn't be as applicable.

[00:21:07] But then as Niall said it's up to the people in there to record their own wastes to record what's actually being left over each day, so they can have a look at it and plan better going forward. I always think that people should learn from their mistakes when they had food waste in the past and then look at it and figure out how can they not let this happen again.

[00:21:25] And I don't think you need software for that, but the software is a very good tool for recording exactly what is being wasted, how much has been wasted, when it's been wasted as well, and I think this is very good information that can be analysed and plans put forward. But with these companies I would love to see them being more proactive in giving solutions, not just purveying your data of what's happened, but actually giving you a plan as how helping you to understand or helping you to not let this happen again, going forward.

[00:21:54] **Ruth Hegarty:** So, Niall we've been talking in detail about managing food waste, but can you briefly talk about some of the other areas of kitchen operations that need to be considered to reduce waste and improve efficiency?

[00:22:06] **Niall Hill:** Yeah, I think the area of labour management I think is really important, you know because obviously, you know there's your labour costs to consider, but also having to look at wasted man hours and being inefficient through your ordering and also your menu planning and how you're prepping and that.

[00:22:21] If you take for example, if you under prepare a dish and you run out it, means you have to do it again, which is costing you money okay. Also, I think yeah, I got, actually I'm going to give you a really good example, you know we used to peel about a hundred kilos of potatoes every day.

[00:22:34] So we developed a system where the whole kitchen would stop for 15 minutes, we'd peel them in 15 minutes, and it'd be done. So, I done an exercise based on that instead of leaving one person on that job for, you know several hours it actually ended up being cheaper for me to do that, so and it also drove efficiency as well.

[00:22:50] So it's also, you know it's improving your profitability as well. Then other areas that I would be looking at is recipes that are, you know that are scalable so that you're making these recipes maybe, three times a week rather than possibly every day. Another is storage, it's a real concern that you have proper storage and that your food is being stored properly.

[00:23:09] And then another area that I feel that it has never really taken seriously is maintaining equipment preventable maintenance. So, you know if, I think sometimes you know businesses feel that well it's not broken, so why would I be putting money at it? I always feel well I'm going to actually maintain my equipment so that I'm not wasting food through it over cooking.

[00:23:27] So in particular pastry. So, you know pastry is you get one shot at it, so you're making sponges if the temperature isn't right, it isn't controlled, it's wasted. So, for me preventative maintenance is really important. Yeah so, they're the kind of areas that I would be looking at probably the other is.

[00:23:42] Oven space, is maximising your oven space as well, so that you have a 20-grid oven, that it's full when you're cooking something, that you don't have two or three trays on it so, it's maximising energy as well which will automatically lead to you saving money and improving efficiencies.

[00:23:57] **Ruth Hegarty:** Brilliant that's super and I really love the idea around the whole team peeling the potatoes together seems like it'd be a good team building exercise as well and no one stuck in the corner peeling potatoes for the whole morning.

[00:24:08] **Niall Hill:** It is yeah, for sure.

[00:24:09] **Ruth Hegarty:** Okay great and so I suppose to wrap up and talking about solutions I'd like to just ask both of you maybe briefly for your top tips on what every business listening could do to take action on food waste in their kitchens so Maurice, let's start with you.

[00:24:25] **Maurice McGeehan:** Yeah, I mean for me, I think there's no quick fix or silver bullet to this, I think this will require a lot of planning, a lot of educating training. And I think every business should start off with small incremental changes over time.

[00:24:38] I think if you start big at the beginning, you're going to trip yourself up and to be honest it may put you off going down that road. But I think if you could, each week if you could make one change, maybe two changes two weeks over a month, then next thing you've got 8, 10 changes done. I think that'll help bring it in.

[00:24:55] And the thing as I talked before about, you know the labour side of things and how would you use by-products? Start planning your menus to include these, start planning your dishes that okay, I'm going to spend labour on something that needs to be used up and this is going to be a component for a dish now this is preventing food waste, but it's also increasing my gross profit percentage and my food cost as well.

[00:25:15] Also as well if people could try and grow their own, if they have the space or the capability, I think hyper sourcing is a brilliant thing now, even if it gets a small percentage of it. It is a small percentage and if more people are doing it, that's more small percentages that'll add up. So, I think if people can try and start growing their own things, if they can that will also be a big help.

[00:25:34] **Ruth Hegarty:** Yeah, that certainly adds to the appreciation of the product and the effort that it takes to produce.

[00:25:40] Niall?

[00:25:40] **Niall Hill:** For me Ruth it's all about it's all about costs.

[00:25:43] It's all about identifying where the waste is coming from and having that information really allows you to tackle it in a measurable way so yeah, so that would be my top tip understand where your, where your waste is coming from and how much it's costing you.

[00:25:56] **Ruth Hegarty:** Super and as we mentioned earlier that EPA research project and report that's called Less Food Waste, More Profit and it's on the EPA website and that can maybe help people just with some guidance in terms of analysing what they are wasting and also getting an estimate of what it might actually be costing them.

[00:26:13] That brings us to the end of the fourth episode of the Inside Food series. My thanks to Niall and Maurice for joining me today and sharing their knowledge. You can find practical tools on waste management in the Breakfast Innovation Toolkit on the COVID-19 Business Supports Hub at Fáilte ireland.ie.

[00:26:29] In the next episode, I'll be chatting to Phillip O'Neill General Manager of Clayton Hotel, Dublin airport and Cariona Neary of Neary Marketing and we'll examine how food businesses can drive sales and minimize costs.

[00:26:40] I hope you'll join us then thank you.

[00:26:42] **Voiceover:** The Inside Tourism Business podcast is brought to you by Fáilte Ireland, the national tourism development authority. Subscribe now on your favourite streaming platform and join us next time for more expert advice and insights.