

In A Bite with Charlotte Mei

Tidbits - is 'microwave-safe' really safe though?

Full Transcript

Charlotte 00:04

Hello, hello! You're listening to another episode of Tidbits. A short form podcast episode of In a Bite, where I answer questions sent in by listeners of the show based on their previous episode.

I received a few messages from some of you after last week's show saying how it's your favourite episode so far in terms of the content and also how the show was presented in general. And I just wanted to say a big thank you for that! I'm glad you liked it. And coincidentally, episode four on Microwaving Food also happens to be my favourite one.

I really like the episode in terms of recording because I simply felt the most at ease and I was happy with the final results. Maybe it's the topic, or maybe it's me easing up several episodes in... I don't know, but I'm enjoying this trajectory, if you would.

I mean, if you heard the first episode, you'd definitely be able to see the difference... or hear the difference, rather. I may have a background in radio, but it definitely took me some time to get those muscles warmed up. And, you know, having you send in messages like that is really, really useful to me. So keep them coming in!

And talking about you sending things across, let's get into this week's questions!

Okay. So this first one, I couldn't not answer it. This person asks: Are microwave safe plastic boxes really safe? And you know what? I actually never really thought about this before, so a very good question. I wasn't really sure myself and had to look this one up to be extra sure.

So first, a basic 101 on plastics.

Not all plastics are the same. Different types of plastics contain different additives which serve to stabilise and shape the final product. And depending on the so-called recipe for each plastic, each of them have different levels of flexibility. So you know, you've got your soft, pliable, flimsy cling wrap plastic. You've got the harder ones that you can't even bend. You've got, you know, flexible yet sturdy silicone plastics. I mean, they're all so different I mean, just flip to the bottom of, you know, these different plastic products and you'll see that they have a different number on them. It could be anything from one to seven, and this just shows you which type of plastic it is.

And this also means that they have different levels of melting temperatures. And out of these additives that are used to shape and stabilise the plastic, some of them are considered to be endocrine disruptors. This means that they mimic or block natural

hormones in the body. So when plastic starts to melt or gets exposed to high temperatures, these substances may slowly migrate into the foods and it's not best for our health. And this is why using the right type of plastics with our food matters. Essentially, only use plastic containers that are labelled as microwave safe. You should be able to find a label on the container itself. And if you're in doubt or you don't see the label, please do not heat it up in the microwave.

But now that I've told you to use a plastic container that is labelled microwave safe, does it mean that nothing gets migrated into our foods? Not quite so.

According to a source by the American Chemical Council, all food packaging materials, whether glass, aluminium, plastic may contain substances that can migrate in miniscule amounts to our food and drinks, whether they're exposed to heat or not. But these substances migrate much faster when exposed to heat, such as in the microwave oven.

So the hotter the food or the container, the more migration happens. And when plastic gets too hot, they break apart. And this is why you see plastics warm up and change shapes when they're overheated. So definitely not a good sign

The thing about microwave safe plastics is that they have a higher temperature threshold than other types of plastic. So the migration levels are low and hence they're said to be safe for heating foods.

So, yes, some migration does happen, but it's the dose that makes a poison. So how often are you eating foods out of a hot plastic container? Are you exposed to these chemicals in other settings? In your day to day, etc., etc.?

So, quoting Greg Blonder, scientist and professor at Boston University, who, by the way, knows quite a bit about microwave technology. He says plastic containers shouldn't be on the top ten list of items to worry about when it comes to food and chemical dangers. But it's in the top 50 or 100.

And as for me, I probably wouldn't heat up food in a microwave safe container unless I'm out and I don't have a plate to transfer the food on to. If I'm home, I would make my life simpler and microwave the food in a microwave safe glass or ceramic serving dish that I can then use to keep leftovers in as well. It's safer and it saves time and washing up! So just being practical and super safe here. I also learned that scratched or cracked containers are more likely to leach chemicals so if you have any of these at home, you might want to toss them out.

And this next question is obviously from a kitchen microwave oven user. They ask: what are the ideal foods to microwave? And are there any foods that shouldn't be microwaved?

As mentioned in the previous episode, there are many things you can cook or heat up in a microwave. Obviously microwaving anything for too long would not yield a great result. You can end up toughening up proteins or completely drying up something if it's a low moisture food.

Now, according to Food IQ, that's a great book for all you food geeks out there by the way, they say that cooking or rather making baked potatoes, quesadillas, popcorn, defrosting or reheating food or melting chocolate or butter is great in a microwave oven.

And I thought this one was pretty interesting as well, if you want to soften ice cream, it will do a great job at that! Only big tip to remember is to finish up everything you soften because refreezing melted ice cream... It's just... it's not ideal. You don't want to do that. You won't want to eat your ice cream once it's been refrozen. So if you want to check in an entire pint into your microwave oven, that's completely fine. Just make sure you find enough people to share it with.

Whatever it is, always watch over whatever you're putting into the microwave, okay, because accidents may happen. You want to keep a watch over it.

And if you watched Bon Appetit videos regularly on YouTube over the pandemic like I did, you would be familiar with cookbook author Priya Krishna. Now, she used to be a contributor on the platform, and she's now a reporter for The New York Times. So I thought, this is pretty cool. She cooks her basmati rice in the microwave! And if you're someone that cooks rice at home, you would know how big a timesaver this is. I have not tried this, but the reviews are mostly positive. I will add a link to her recipe in the show notes, along with a recipe for daal that is also done in the microwave.

And this is where I wish I had a microwave oven because I just want to try out all these cool recipes and also share with you my personal take on them. But for now, I'll just have to rely on your reviews when you try it out.

And here's another one for you. One of the authors of Food IQ, Daniel Holzman. Well, he used to work at a three Michelin starred restaurant in New York, Le Bernardin, and he shares that one of the dishes he used to work on was done in the microwave oven. And this is simply because it allowed for precision. So there you go! There is a place in time for the microwave oven, even for gourmet food.

Every week I put together a newsletter that I think you'll enjoy. Like this podcast, it has nuggets of information on nutrition. And it also shares a little more into my daily life. From a behind the scenes look into the projects I'm involved in, to the stuff I consume. Just three things from my week that I want to share with you. To subscribe, all you have to do is head over to my website, thecharlottemei.com, or click the link on the show notes.

And if you could do me one small favour, share this episode with one friend that you think would find this interesting. Let's get more people listening to anybody and make their journey in relationship with food easier. My name is Charlotte Mei, and I'll catch you on the next episode.

For the full transcript of this episode, head over to my website thecharlottemei.com/podcast.