Lauren 00:06

Welcome to the LDA podcast, a series by The Learning Disabilities Association of America. Our podcast is dedicated to exploring topics of interest to educators, individuals with learning disabilities, parents and professionals to work towards our goal of creating a more equitable world.

Tracy Gregoire 00:23

Hello, everyone. I'm Tracy Gregoire, the director of the Healthy Children Project. And today I have Charlotte Brody, the National Director of Healthy Babies Bright Futures. She's going to talk about the new report "Is homemade baby food better?" a report that analyzes the toxic heavy metals and homemade versus store bought food for babies. Charlotte, I know we both agree that no child should be exposed to lead or other harmful chemicals in the food that they eat. But heavy metals, including lead and arsenic are in baby food and fruits and vegetables that we feed our families every day. But why are these heavy metals in our food? And what can we do to protect children? I'm hoping we can focus on that today. And I'd love for you to start with telling our listeners about the report and why you are focusing on heavy metals.

Charlotte Brody 01:11

Thank you, Tracy, I really appreciate being able to do this. So Healthy Babies Bright Futures started looking at food when our research director Jane Houlihan surveyed all of the available literature and realized that for most children, food is the largest source of heavy metals. And that for most children, heavy metals are the largest source of the chemicals that impact the developing brain. So having lead and arsenic be the biggest bad actors, for the most babies. And having food being the largest source of these bad actors, was why we ever began looking at food, and trying to figure out what was going on with lead and arsenic and cadmium and mercury, but especially lead and arsenic.

Tracy Gregoire 02:12

Thank you. I know in 2019, you released another report about heavy metals and baby food. And I remember I went and was one of the shoppers for that. And a lot of LDA affiliates were shoppers for 2019 and this report this year. Do you want to just share a little bit about the other report and what it focused on and why you felt you needed to focus again on heavy metals and baby food?

Charlotte Brody 02:40

Yes. So in 2019 our report that you and many other people shopped for around the country, found that 95% of the baby foods tested had one or more heavy metals. And this was when we only asked shoppers to go into the baby food aisle to find products looking for the products that are most often eaten by babies. And that report got a lot of attention. And many of the responses, both of the things that people said online and some of the blogs that were written and news stories that were written about it, proposed a solution that we didn't include in our report, that solution being that if you make your baby food at home, you don't have the problems of lead, arsenic, mercury and cadmium that you do if you shop from the baby food aisle. And we didn't know the answer to that question. But we were worried that since the jar of sweet potatoes or the pouch of carrots are made from the same basic ingredients as making the food at home, that it might not be true. And we really felt a responsibility to figure out if that was the solution. And so we sent 47 shoppers, including many people from the Learning Disabilities Association, out to test whether making food at home was safer. So I was one of

the shoppers and I bought infant rice cereal and a bag of rice. And I bought a jar of baby food carrots and some carrots from the produce aisle and there were 288 pairs of foods, and we tested those to figure out if making food at home was better.

Tracy Gregoire 04:45

Alright and that's a big undertaking for anybody who hasn't done product testing or food testing. It's a big, big project. So thank you for taking that on. I know as a new mom I certainly made some of my son's baby food as well. And you're right, you have more control over the ingredients, what you're feeding them, you feel better about it. But sadly, I think one of the big takeaways was that homemade baby food wasn't necessarily safer in terms of the heavy metals specifically.

Charlotte Brody 05:17

That's right. But the good news was that it wasn't whether it was made in the baby food factory, or in your kitchen. It's what you made. So I made a lot of homemade baby food, I had one of those little grinders, and bananas, eggs, and green beans. There are plenty of foods that don't contain heavy metals, whether or not you buy them in the baby food aisle or in the produce aisle. And so we both talk about the problem in our report, and the need for stronger government action to address this problem. But also talk about the things parents can do today to pick foods that just don't pick up heavy metals.

Tracy Gregoire 06:00

Absolutely. And one question I think many listeners will have is why are heavy metals and food to begin with, right? It's not like any company or any farmer is adding those heavy metals purposely to our foods. So why are lead and arsenic, cadmium, and mercury found in our food?

Charlotte Brody 06:21

The biggest reason for the problem of heavy metals in our food is that nobody's been paying attention. The FDA, like so much of the scientific community, is still sort of stuck in the 60s with this idea of high level exposures, the kinds of exposures that for example, if they're to lead, cause seizures, that those are the only kinds of exposures we need to be worried about. And then as long as the exposure is under some magic number, it doesn't cause any harm. And what we've really realized, and the Learning Disabilities Association has been an incredible partner in this work, is to recognize that small exposures matter, and they especially matter to the developing brain, and lead and arsenic especially are prime examples of how there's just no safe level of exposure, that harm is caused at any level of exposure. And improvements can be made, every time we lower an exposure, a threat to a developing brain. So that's the biggest reason that we have these contamination levels. The other reasons are a combination of both people-made and nature-made contamination. Lead was used to make fertilizer heavier, and spread on fields, arsenic was actually used as a pesticide for many years. And that added to the contamination that in some places naturally occurs in soil and water. I should say that part of the reason that rice is a problem for arsenic is because arsenic gets into the water supply, including in Maine, where you're based.

Tracy Gregoire 08:23

Right, absolutely. And I know, like we test our well periodically for heavy metals and for other things. And, you know, one thing parents can do is testing their water, and we'll get into some of those exposures, but including infant formula, right, which can be an issue, but also like you're adding water to that. So making sure that the water is as safe as possible is really important.

Charlotte Brody 08:48

Really important. And you know, people say well, I test my well water. And then when you ask them what they tested for, they say well, it's the standard test. The standard tests for E coli. Right, the standard test is to see if your sewage is getting into your water supply, you have to make sure that they're also testing for heavy metals. Right? Absolutely.

Tracy Gregoire 09:13

So talking a little bit about who is most exposed? I know we both agree that lead and other heavy metals is an environmental justice issue when you look at who is most exposed, low income communities, black and brown communities. When you talk about cumulative exposures, when it's not just the FDA has, you know, in a few cases like this is the safe level. Right? And in most cases they don't have a health standard level for these heavy metals. But even when they do it's based on one exposure at one time and not cumulative exposures. Not you know multiple different heavy metals say baby food, not lead in your water, not lead based paint not other chemicals like phthalates that can harm children's brain health. So that's part of the problem, right, is that we need to look at who's most exposed to a number of chemicals that can harm children's brain health. So I know you have a little section in the report about this, but can you share a little bit about some of the highlights?

Charlotte Brody 10:19

Sure. So we didn't know what we would find in terms of exposures from family foods versus exposures from the baby food aisle. But we found that actually, they're the same, that 94% of the baby foods tested were contaminated, which is really just a rounding error, right, from the 95% last time, and 94% of the homemade foods. One of the things that I thought was especially interesting is what a crapshoot it can be to buy foods for your families that one of our shoppers found, picked up a sweet potato at Walmart, that was 10 times more contaminated than the other sweet potatoes that other shoppers bought. Another shopper bought a carrot in California that had no contamination, none. And so we, you just can't know what you're buying. So that to me calls out that's why the government has to do more. But in the meantime, we suggest that people don't always buy the same kind of sweet potatoes or don't always buy the same kind of carrot, that you vary how and what you buy in the produce aisle. We also found that of all the foods we tested, foods made of rice had the highest levels of contamination in our tests, rice cakes a food I fed my children all the time, because wasn't that better than cookies? It turns out rice cakes have a whole lot of arsenic. And so we recommend against feeding your child rice cakes, and not from our lab analysis, but from the FDA analyses that we included in the almost 8,000 findings that went into the report. Crisp rice cereal, the generic name for Rice Krispies, also had a whole lot of arsenic. So we recommend against those two foods and against brown rice for young children. And we also include the important information from the FDA about how the way you cook rice can lower the levels of arsenic. I was taught to cook rice so that you carefully measure the amount of water and the rice is done when the very last drop of water is out of it. It turns out that's not a good idea, that leaves the arsenic in the rice. And instead, we should be both washing the rice a lot. It washes off some of the nutrients but it washes off some of the arsenic too. And then making rice the way you make pasta. Right where you pour off a lot of the water, that deals with a whole lot of the arsenic level. There's an

environmental justice issue in that Hispanic families and Asian families rely much more on rice as a staple. And so the research that's being done on how to convince rice to pick up less arsenic is incredibly important, you know, not just for the most expensive organic basmati rice but for all rice that we really figure out what's the best way to grow rice to leave the arsenic in the ground and to not have the plant pull it up and put it into the food you're feeding your family.

Lauren 14:27

Get ready for LDA's 60th Annual International Conference in Las Vegas from February 21 to 23rd. For 60 years LDA has held annual conferences that aim to raise awareness about learning disabilities and provide individuals, educators, grad students, families and professionals with the latest information and learning disabilities topics. This year we'll be holding LDACON at the Las Vegas Flamingo Hotel. Learn more and join us by visiting bit.ly/LDACON60.

Tracy Gregoire 14:58

All right, so that seems like there are some simple tips parents can do. And as a parent, I tell people, you know, there are chemicals in lots of things and I make choices for my family. And sometimes I know there's some exposure, but we do the best we can, have a varied diet, which is one of the recommendations, and feed your children different vegetables and different fruits, and have more of a variety. But anytime you can lessen arsenic or lead or another neurotoxin that's helping your whole family.

Charlotte Brody 15:33

That's right, that's right. And every step in that direction helps. But Jane writes in the report that this is a cause for concern, not alarm. And I thought that was a really important distinction that, really, we need the federal government to do what they could have done 10, 20, 30, 40 years ago and set health limits, you know, you talked about that earlier. And that's the way the government should work is to figure out what's healthy. What FDA has done in the few limits they have set for arsenic in infant rice cereal, or for lead and juice is really to set limits at what industry is already doing to just push out a few of the bad actors. And if you want to do that, you know, as a step towards better rules, then say you're doing that. Say that this isn't a health based standard, say that this is an interim step towards setting health based standards and giving the industry the time to figure out how to source apples from orchards that have lower levels of arsenic or, or how to figure out what in the process in food processing is adding lead to juice, but what we really need is action levels that are set based on what's healthy for people, including babies, and healthy even for people, as you said, who have disproportionate exposures, including black and brown babies.

Tracy Gregoire 17:21

Right? Because I think a lot of people don't know, when they set a health limit or test chemicals it's usually based on a white full grown male, right? Not little children, not women, not, like you said, communities that are most vulnerable or hardest hit by chemicals. So that's a little bit about what the FDA or the Food and Drug Administration can do, because I know they only have set limits on a couple of things like arsenic in rice cereal, but they haven't set limits on all of these for heavy metals in all foods, is that correct?

Charlotte Brody 17:52

That's correct. And the limits they have set aren't protective enough. They're more protective of industry than of babies. And so we were very pleased that the Food and Drug Administration announced the closer to zero program last year, as a result of the congressional subcommittee attention, which in part was a result of our work. So we're very proud of that. And we loved that it was called closer to zero. And that it captured the idea that this needs to be an iterative process, right, that we need to lower the levels, then get there and then lower the levels again, and then get there and then lower the levels again, and over time, figure out the agricultural practices and the manufacturing practices that can eliminate this problem, that in a world of problems, this one we can actually fix, right. So let's be about doing that. So the FDA set up the program, good, you know, with an ambitious set of goals and they got extra money from Congress to make the work happen. Good. But then the first limits that they've set are just not protective enough. Instead of leading the industry towards safer levels, they're lagging. They're based on what the industry has already figured out how to do. And that's just not good enough for babies. So we hope that the FDA will act faster and more boldly to set limits that they truly are on the path to protection and take seriously would closer to zero means that no as we drop the levels as we have in rice cereal, let's figure out how to then come back around and instead a new even lower level that over time eliminates this problem.

Tracy Gregoire 20:05

Right and, and so that's a little bit about what the FDA can do. I know you talk in the report and we both do retailer work, right, to push companies that sell these products to set health protective limits and to tell their suppliers: we're not going to sell rice cereal, for example, that has high exposure, if you can't make it safe for consumption. So you talk a little bit about what companies can do, including requiring growers to follow accepted best practices, and to test crops. So can you talk a little bit about that?

Charlotte Brody 20:40

Sure, that, as I said earlier, it's not a constant problem. One truckload of sweet potatoes might have a whole lot more lead than another truckload, one batch of rice might have a whole lot more arsenic than another batch. So it's important for both the growers to figure out which fields have more or less heavy metals that the plants will pull up. We know, for example, that the levels of lead in soil are higher closer to a highway because of all those years of lead being in gasoline. So look at the field and think about growing food in less contaminated fields. One of the promising areas of research is to figure out if there are cover crops that would decontaminate fields, is one promising idea. Another idea is that there's some evidence that plants are like people, you know, we know that if a child has, or a pregnant person has enough calcium, they don't pull in lead, right? The calcium sort of is already in the bone and it doesn't absorb lead, because the bone is kind of full, and with a good metal in calcium. So there's some evidence that the same thing is true for plants, that if there's enough good metals, like zinc and calcium in the soil, the plant will pull up less lead and arsenic. But all of this is new information that won't be used unless we, the baby food companies, and other food processors work with growers to test the fields. So they know what's going on, right, that so much of this problem is because no one's been paying attention to a problem that's been there for a long time. And a lot of what we're asking companies, retailers, and food manufacturers, including the baby food companies to do is to pay attention and to get their growers to pay attention so we can address this problem.

Tracy Gregoire 23:17

Right. So some of this is longer term solutions, which we absolutely need. And I know you've gone over some tips, but just to go over some more tips for parents like myself who want to know how to protect their families the best that they can, can you talk a little bit about skipping totally certain foods. I know the rice cereal has been, people have known about that for a while, but avoid rice cereal, and instead use multi grain or other grains for cereals for babies for cereals. And you've talked about, you know, avoiding the crisp rice cereal, which one brand would be Rice Krispies. Brown rice with no extra cooking water, like the puffs, like those snacks and of course rice cakes that we all eat. So those are some of the, you know, skip totally. And you talked about white rice and how to add extra water and then kind of let the water off when it's done cooking and that will take some of the arsenic with it, which is great. But you also talk in pretty good detail in your report about what to serve and have some nice charts about things to limit or severely limit or totally avoid. So I know there were 13 foods with very low heavy metal contamination, so, for example, fruit you say fresh and frozen food is good, but not canned, to avoid canned food.

Charlotte Brody 24:43

We found a lot more lead in canned fruits than in fresh fruits. So relying more on fresh fruits both as a source of nutrition, also frozen as a teething tool rather than using a teething biscuit, all of which we found had pretty high levels of arsenic because they have some rice flour or rice in them, we think. And another good choice for teething is a frozen cucumber. And a cold, almost frozen washcloth is a really good choice for a baby rather than a teething biscuit. Less expensive, too, you can reuse the washcloth many, many times.

Tracy Gregoire 25:38

And I know it's also true for fresh or frozen fruit versus like fruit juices because the fruit juices aren't as healthy and can also have more of the heavy metals in them as well.

Charlotte Brody 25:49

That's right. And you know, the American Academy of Pediatrics has encouraged parents to not serve their children any juice for several years, both because of the contamination but more because they have a lot of sugar and they don't have the same nutrition as a fresh piece of fruit. But babies drink a lot of juice in spite of the advice of AAP. So it's important that we get the levels of heavy metals down in juice as much as we can.

Tracy Gregoire 26:24

Right. And I know you talk about vegetables, like some good vegetables to serve like green beans, peas and butternut squash are some of the examples that you gave in the report.

Charlotte Brody 26:36

It was interesting that when we looked at the agricultural research, which is a whole section of the report that my colleague Jane Houlihan wrote, squash can be a big source of heavy metals. But butternut squash doesn't seem to pick them up. So there's probably a lot more research we can do there to figure out why some squashes do and some squashes don't. But butternut squash is a really good alternative to sweet potatoes, which tend to pick up a lot more heavy metals.

Tracy Gregoire 27:09

You know, thank you for including all of those tips. And you've got some nice charts and lists about what was found to be the most contaminated and the least contaminated so that parents and others can look at those. And I know even as an adult, right, there are no known safe levels of these heavy metals. So we try to protect everyone, but we often talk about children, young children, babies and pregnant women, because the young child's brain is most susceptible to chemical exposure and to other chemicals in general. So that's...

Charlotte Brody 27:44

And they're eating a lot more, you know, per pound of body weight than the rest of us are. So it's a really important time.

Tracy Gregoire 27:53

Well, thank you so much. I want to let our listeners know for more information on this report, you can check out healthybabyfood.org which is the Healthy Babies Bright Future website and wonderful report and also healthychildrenproject.org. Charlotte, is there anything that you would like to say in summary about the report?

Charlotte Brody 28:14

No, I just hope that people will read it and pass it around. The fact sheets and the executive summary are on healthybabyfood.org in both English and Spanish. And we look forward to the day when we can celebrate that this problem has been solved.

Tracy Gregoire 28:34

Right, LDA loves working with you and our other partners to get to that point where all food and products on store shelves are safe. So Charlotte, thank you for your work. And thank you for joining us today.

Charlotte Brody 28:47

Thank you.

Lauren 28:53

Thank you for listening to the LDA podcast. To learn more about LDA and to get valuable resources and support, visit Idaamerica.org