

Christopher Wark (00:00.686)

Did round up cause lymphoma in this particular individual? So we were able to prove that in Mr. Johnson. And then the punitive damages were damages that were awarded by the jury because of Monsanto's behavior, such as ghost writing, such as knowing the problem and not acting on it, and all of these things that are important. And the verdict was \$289 million.

Christopher Wark (00:31.662)

Hey gang, today I am interviewing Dr. Chadi Nabhan. He is an award -winning hematologist and medical oncologist who hosted the Outspoken Oncology podcast, which has now been rebranded as Health Care Unfiltered, which features candid discussions on the most pressing and controversial medical topics, which I love, by the way. I love controversial medical topics.

And combining his background in cancer research and healthcare advocacy, Dr. Nabhan has a unique and powerful perspective for current medical events and important information for patients and caregivers and really anyone who wants to be informed about how the medical industry operates, the perils and pitfalls, risks, benefits, all that kind of stuff. It's good to know that before you have a health crisis. Now,

I was particularly interested in interviewing Dr. Nabhan because he testified as an expert witness in the first three litigation trials against Monsanto because of their potentially cancer causing herbicide Roundup, which contains glyphosate and is the most commonly used herbicide in the world. Now, Dr. Nabhan has a new book called Toxic Exposure.

the true story behind the Monsanto trials and the search for justice. So, some of you I know are already getting excited about this and so Dr. Nabhan, thank you so much for taking the time to do this interview. Chris, thank you so much for having me. I really appreciate connecting with you and your audience. So I'd love to start with your personal journey. How did you end up on this path of investigation and research to

to toxic pollutants, contaminants, glyphosate. Where did all that start for you? Things happen with serendipity, as we say. And I actually do describe that in the book because it was never something I thought I'd be involved in, nor did I ever frankly anticipate the magnitude of what I'm getting myself into.

Christopher Wark (02:48.782)

But as medical oncologists and hematologists, occasionally we do get called by law firms to testify as expert witnesses, most commonly in malpractice cases to assure that patients are receiving the proper therapy. And this was never something I ever wanted to do.

Somehow I took this call because a colleague of mine asked me if I would be willing to speak to a couple of lawyers from the Miller firm. It's a law firm based in Virginia. And if it wasn't for him, I would have said no, and I would just have politely declined. But I said, sure, I'll just speak with them. And as I was listening to them talking about glyphosate and Roundup and some of the

pending litigation trials,

I have to admit I was intrigued because as we all do, as you hear something that you're not very familiar with, what do you do? You go to Dr. Google and you Google and try to understand what's actually happening. I knew a roundup. I mean, you know, you go to Home Depot, Walmart, Costco, you just see it. But I wasn't really familiar with is some of the stats. As an example, you just told your viewers and listeners it's the most commonly used herbicide in the world, which is

a fact, but it underscores that, that my gosh, I mean, if this is indeed linked to something bad, then the implication is actually huge. But I wasn't well informed. I did tell them though. I said, you've intrigued me enough in this 30 minute conversation that I'd like to actually do a little more studying and due diligence and,

And I'll get back to you to see if this is something I would be willing to participate in or be part of. And I did, and I studied about it and I did some literature search and read a lot of scientific articles. And as you could imagine, there are many studies supporting that it's the safest thing in the world and studies that can test that. But you have to put everything in context.

Christopher Wark (05:03.95)

and you have to really look at the entire information and data. And after I did that, I was convinced that there is some linkage between Roundup and cancer for some patients, not all patients, of course. And I called them back and I said, this is something I'm willing to be involved in. So that's really how this all started. And with time, I became more familiar with glyphosate, with the impact, with

what it does. And similarly familiar with Monsanto's practices as a company and how they actually dealt with some of the emerging evidence pertaining to the glyphosate and its link to non -Hodgkin lymphoma, which is a form of cancer, which of course I'm happy to explain to you. Something else worth mentioning, I think, is that when you're looking at this research, some studies saying it's safe, others saying it's dangerous.

It really does depend on who funded the study, correct? Absolutely. And this has been actually presented in core documents and been written about. And, you know, for your listeners and viewers, the concept of ghost writing is very important. So ghost writing is when an article is written and there's an influence from outside into the content of the article and the...

what's written in the article without acknowledging that fact. And it has been actually shown on and on, you know, several times that Monsanto did engage in ghost writing and they did actually influence some of the scientific articles that were published. And there's several pages in the book, actually, I specifically talk about this because it's literally something out of, like you would never imagine where

You know, articles that are written and people say, well, wait a minute, you know, why didn't acknowledge Monsanto was involved? And then the publisher deals with the editor in chief and the editor in chief says, do we retract this? Do we issue a concern note? And then somebody resigns and the other one quits. It's like literally out of movies what's happening. So yes, you're absolutely right. It's who funds the study? Who's writing the study?

Christopher Wark (07:28.142)

You know what's ironic though, is one of the meta -analyses, it's a large meta -analysis, was actually funded by Monsanto, the manufacturer of Roundup. And that meta -analysis did show that there was some link between non -Hodgkin lymphoma and glyphosate. So sometimes it's hard to hide all of the evidence. And so how did that...

proceed for you from you having this awakening, researching, seeing that this could be a problem. And what happened next? So, I mean, at the time, I felt I was just getting a crash course in the legal system of the United States, just not understanding, you know, except what you just watch on Netflix, frankly. But, you know, there are lawsuits that were being filed.

And usually some of them, they're given a trial date and some of them they're not. And they were just, you know, lawsuit after lawsuit. I mean, tens of thousands of lawsuits were starting to accumulate. The trial date was given to the first case in July of 2018. That was the first trial, but basically it was Lee Johnson against Monsanto. In that trial, I was supposed to testify on behalf of

Mr. Johnson to explain to the jury why I thought Mr. Johnson's lymphoma, specific lymphoma, which was T cell lymphoma, and I can explain that, was caused by glyphosate and his use of Roundup. Before that though, Chris, there's a multitude of other things that usually happen in court. So I had to go to court several times.

As an example, there's something called the Daubert hearing. The Daubert hearing is usually when both sides, Monsanto and the plaintiffs, they bring their experts to the court. There's no jury. There's only a judge. And basically, the judge has to assess your credibility as a witness. And did you really use proper science in reaching the conclusion? He or she may not be interested in the conclusion itself.

Christopher Wark (09:50.894)

but they are interested in the methodology. In other words, did you use sound science or do you just get things out of a hat? And then the judge has to decide, indeed, you're allowed to testify or no, you cannot testify. So that's a very, you know, very tough experience usually. And we do this before the lawsuit, before the trial date, before the trial begins. And then the trial begins and it...

I think it took five to six. Let me interject something. That could be a difficult hurdle because judges are not trained in science. Judges are really not trained. They don't have scientific background. So they could easily be misled by, you know, someone who is misrepresenting

science or they could, right. I mean, or they could dismiss something that is actually valid and because they didn't understand it. And I don't disagree. I think, you know,

Frankly, nobody in the legal system is trained scientists and I'm not trained in environmentalist, for example. I mean, I can't really speak to the environment as others can. But usually the judges are given all of these documents to read and to prepare. And I have to say that the federal judge, Judge Chabria, who is the one who presided

over the entire federal litigation against Monsanto was impressive. I, you know, having done oncology and cancer care for two decades, it takes me five to six minutes to really know whether the person indeed knows what they're talking about or they're just making things up as they go. And he got my respect right away. His questions were spot on.

He definitely, you could totally tell he prepared and he read every single thing that was provided to him. He knew what he was talking about and he may not represent, your point, he may not represent the all kinds of judges or lawyers that you'll see, but he was exceptionally smart and exceptionally well prepared.

Christopher Wark (12:08.046)

I would say to the degree that he could be intimidating because of how well he was actually ready and prepared. What is interesting though, and you know this, I just don't know if all of your viewers know this, both sides, the plaintiff and the defense, they spend enormous amount of time trying to convince the judge which evidence should be allowed in front of the jury and which evidence should not be allowed.

As you can imagine, the plaintiff wants to put everything that allows them to get their case and the defense want to hide a lot of things so they don't really lose the case. The civil servant in me, as I'm thinking about this, if I'm a juror, show me everything. I mean, don't you want me to know everything so I could reach a conclusion? And I learned the hard way. It's not how it works. So it is a lot of, and the other, you know, even in court, the judge could say,

You can dismiss that statement. You can ignore that statement if something objects. I mean, exactly like you see in the movies, but I'm thinking in order for the jury to reach a sound conclusion, show them everything and let them decide. It's just not how it works. Yeah. The totality of evidence. And that is discouraging, right? That there's, there's that certain pieces of evidence are excluded that might really be, you know, damning. Absolutely.

And, and the first case was the hardest. The first case, Johnson, it was the first, just for people to realize the magnitude of this. Monsanto has never, ever, ever been sued because of Roundup in front of jury in the United States of America or anywhere else in the world until that case. That is how powerful this was. The other thing that is really important. This was the year that Bayer.

the German company had closed on the acquisition of Monsanto. So talks about the sales of Monsanto to Bayer started in 2016, but they closed the deal literally around the time of the trial was completed. Like I think just in the fall of 2018, it was for \$63 billion. And you would think.

Christopher Wark (14:32.398)

If you're going if you're paying \$63 billion, you would want to know what the litigation risk of what you're wondering. Right. I mean, but I remember when that when that news article when I saw that the headline that Bayer had bought Monsanto I'm thinking, what are they doing? Because I've been following Monsanto for years, I knew they're producing all this toxic pesticides, fungicides, herbicides, all kinds of stuff. Like, why would they buy this company? I think two things. First,

I don't think honestly they realize what they're getting into. I mean, the shareholders later on, I describe all of this in the book, the shareholders were like very upset because the stock price, the share price of Bayer stock dropped by two thirds after the litigation. Not only you pay \$63 billion and you could go, I mean, you could go on any website and look at the stock price of Bayer from 2018 and how it just went down.

So you paid that much money and you lost a lot of market cap. So I think they, a, they probably underappreciated these litigations. And number two, they probably were overconfident that, you know, they're not going to win against us. I mean, we're Monsanto, we're Bayer, we're not going to really lose. And in fact, in subsequent years,

the shareholders demanded an investigation whether Bayer did do the proper due diligence before acquiring Monsanto. Surprise, the committee did do the due diligence and I think they did not, but I can't prove it. But they had an internal whatever committee that said, yeah, yeah, we did the due diligence. But you know, that's the only explanation, right? I mean, if you think about it, you pay that much money, you either did not appreciate,

the litigation and the impact of litigation. And you probably did not really do your own proper due diligence about the compound itself. Because, you know, I don't know, if I'm an economist, I would think this was a bad deal. And in fact, the Wall Street Journal, one of the reporters in the Wall Street Journal called this one of the worst business acquisition deals in the history of corporate business. Wow. Yeah.

Christopher Wark (16:53.934)

Yeah, that's a strong statement. Yeah. I mean, the reporter is Ruth Bender and she covered that from the beginning. But it doesn't really take a rocket science. Think about it. So you paid \$63 billion. You dropped your share price from \$40 to \$10. Right now, by the way, they're trading below \$10, \$8 .6 or \$8 .5. Look at their price in 2017, 2018. They've never recovered from it.

You had to settle, and I'm sure we'll get to the settlements, you had to settle a lot of the cases for 11 billion dollars. You had to pay for the cases that you lost and the lawyers. And they're not

cheap. You have, you've been paying for the lawyers for the past five, six years. And in my mind, there's a reverse incentive there. I really believe that some of their lawyers probably telling them to keep going, keep going, keep going because

I mean, if you're a lawyer, you're going to get paid whether you lose or win. It doesn't really matter. You're going to get paid. So why would you tell them to settle and get out of business? Tell them to just keep going. Yeah. That means pure speculation, by the way, pure speculation. I have no idea. But of course it makes sense. So how did the case go? What came out during these trials that was, you know, really ended up, you know, being important to the outcome of the case?

So look, I mean, we'll go for the first case, for example, just as a prototype for all the cases. There are two major issues. One issue pertaining to the patient himself or herself. And what you need to prove is that in this particular patient, it is more likely than not that glyphosate or Roundup was a substantially contributing factor in developing the cancer. What Monsanto will contend,

that we're very sympathetic to the patient who developed the cancer. We feel bad for her or him, but we don't think this happened because of roundup. This happened because of bad luck or because of something else, you know, their obesity or their old age or whatever it is. That's one part of the equation and I'll describe it. And the other part of the equation is Monsanto's behavior.

Christopher Wark (19:17.998)

Like it's almost if you really have nothing to worry about, why did the ghost writing? Why do you not acknowledge the some of the reports? But you know, they didn't need to because they had all the regulatory authorities on their behalf. They said the EPA EPA EPA said it's safe. So therefore it's safe. So if the EPA tells you anything is safe, you are not supposed to ever contest that. And that's a problem.

as scientists, as citizens, actually, we are supposed to hold our governmental agencies feet to the fire and we are supposed to ask questions, especially if there's some contradictory evidence. But they don't want that. They say, well, if the EPA said it's safe, are you going to know better than the EPA that employs thousands of people? So that's how it went. So for the first, to demonstrate that the patient that the roundup

caused the cancer in the particular individual, you'll have to go through a process of differential etiology. Now, what does that mean? You go through what could possibly cause this particular cancer in this particular patient. There are cancers that we know what could potentially cause them, and many cancers we don't know. And if we don't know, we call this idiopathic. It's just a smart word to...

tell people that doctors do not know why this actually happened. I know that you had developed

colon cancer at a young age and I'm glad to see you thriving and doing great. At the age of 26, most people would assume this is because of a genetic mutation or something that has been passed to you from your parents on to you at that age. And I presume this was not the case in your situation. So,

I mean, otherwise they usually check it and they're able to actually tell if there's a particular gene. And if there's not, then you start thinking of where we don't know why it happened, it just may have happened. But the bottom line is I usually go through the process of elimination. And I told the jury, let's look at what could cause the cancer, the lymphoma in this particular individual, Mr. Johnson.

Christopher Wark (21:40.878)

So I wrote on a whiteboard, you know, we could put age, race, and, you know, we put autoimmune disease, we put some medications that people get, we put some viruses, some bacteria, I mean, a lot of things that could cause it. And then I clicked, clicked, clicked. I mean, none of these contribute to this person. Then we're left with occupational exposure. What type of...

occupations may be causing this and what type of pollutants this person could be exposed to. And at his age, in the 40s, he was spraying Roundup, Ranger Pro, the brand he was using every single day, Monday through Friday, eight, nine hours a day. He was wearing protective gears, but he had a lot of spilling accidents and it would come to his skin. It would come to absorb through the skin.

And, you know, I mean, again, heavy exposure, heavy exposure over two years. And when I met him, I asked him, I said, Did you know that it could be risky? He said, You know, they sent me to a course and in the course, the instructor was telling us it's so safe, you could drink it. That's great. And then he even when he started developing a rash, his lymphoma was affecting his skin. It's called T cell lymphoma. He actually called Monsanto. He called the

their number on their bottle. And Monsanto acknowledged by that there's like email communication that was during discovery that they received that call. And that call was actually triaged to the medical director who is a physician responsible for the brand. And he basically laughed it off. And he said, you know, this is crazy talk. It's not really related. And Mr. Johnson never received a call back.

So you have to put every case is different. I think we can all agree as much as I think and you think and I agree with you that glyphosate is terrible and Roundup is awful. It doesn't mean it's causing cancer in every single cancer patient. It's just not the way it works. And also not every cancer or not every lymphoma is caused by it.

Christopher Wark (24:02.926)

So it really becomes, in this particular patient, did Roundup cause lymphoma in this particular

individual? So we were able to prove that in Mr. Johnson. And then the punitive damages were damages that were awarded by the jury because of Monsanto's behavior, such as ghost writing, such as knowing the problem and not acting on it.

and all of these things that are important. And the verdict was \$289 million in the beginning. Of course, it was appealed and a lot of these things at the end. I believe Mr. Johnson did receive \$25 million.

I don't know how much him and the lawyers, but that was the final award. I'm sure they got a nice piece of that. So that was the first trial. And then what followed? Then the class action. So there was something called MDL, Multidistrict Litigation, which is again, you have all of these cases basically combined under one umbrella, basically tried by, presided by Judge Chabriel.

Basically, the MDL is an attempt to consolidate these cases so that they are more, so the trying them becomes more efficient. So you don't really have to do a lot of things at the same time. So the second case was in the federal court. So Johnson's case was in a state court in the state of California. The second case was in the state of California, but it was really in the federal court, and that was presided by Judge Shabria. And that was very important.

So that was the first of what we call bellwether cases. Now, what does that mean? So bellwether cases, these are cases that both sides agree on to be tried. And the judge says, okay, these are the three cases that we are going to try in federal court. No, why do they do that is because it's kind of like set the set the stage into what might happen afterwards. In other words,

Christopher Wark (26:10.286)

If things really go too much towards the plaintiff versus the defense, the judge might have a different opinion of where we actually go next. So subsequent to that was the federal case of Hardeman against Monsanto. And before Hardeman's case, I also had to do the Daubert hearing, which means going in front of Judge Chabria, explain the methodology, and be allowed to testify. And he allowed me to testify.

And in Hardiman versus Monsanto, it was a very important case because not only it was a federal court case, but also it was the case that Monsanto chose to take all the way to the Supreme Court because they lost the case. They appealed, they lost, and they went all the way to the Supreme Court and the Supreme Court refused to hear it. They said it stands and we're not going to hear the case.

But what's interesting about this case is a few things. Number one, it was because it was the first of the Bellwether cases, the judge decided to bifurcate, to split it into phases, phase one and phase two. So phase one is prove to me and the jury that glyphosate causes cancer, prove to me that the cancer of Mr. Hardiman was caused by glyphosate.

Phase two is when we discuss compensation, damages, financial repercussions. So he split those. In other words, if you can't prove phase one, I don't need to worry about phase two. And the jury found for Mr. Hardiman, and then I testified in phase two in this particular case. What is also important in this particular case is that because

The Monsanto lost this case. Judge Chabria thought that now this is the second case that Monsanto loses. They lost Johnson and they lost Hardeman. And he literally told Monsanto, we're not going to do to the two other Bellwether cases. There's three of them. Remember the three Bellwether cases that we're going to try. And he said, you guys need to start talking to each other. So the judge literally after the Hardeman case ordered both sides.

Christopher Wark (28:33.87)

to start mediation and start talking to each other. And he appointed someone by the name of Ken Feinberg, who is a lawyer who was involved in the disbursement of basically compensation for the 9 -11 victims, the 9 -11 families to be the mediator. And so this case was really critical because it was almost,

fork in the road, the judge said, let's start talking to each other because clearly the evidence is dampening. He appointed a mediator. Monsanto tried to take this case all the way to the Supreme Court. It was not heard. So there was a lot of implication, but they lost it. The verdict was \$80 million, \$85 million in change. And it was, of course, appealed and all of that after that.

At the same time, the third case was already planned before he, you know, it was already planned for May of 2019. And this was for a husband and wife. They were older. They were in their seventies and they developed the same. One was in the brain. One was outside the brain, but it was the same type of cells. I mean, call me crazy Chris, but if two people that had been married for 30 years in the same household and they develop.

the same cancer, it's natural to ask what they may have been exposed to. What's the common denominator? And Monsanto actually attacked me on this. They said, well, Dr. Nabhan doesn't want to use science. He wants to use common sense. I'm like, I think it's okay. It's okay to use common sense. I mean, no, but that was a huge verdict because the jury found for the husband and the wife, \$1 billion each.

And it was one of the largest verdicts. It was two billion dollars. And after that, then a lot of the discussion started about negotiation and settlements and COVID hit. So it slowed down a lot of litigation ongoing. It's still ongoing, but they settled over 120 ,000 cases. But there are still some cases that have not been settled. I don't know how many, maybe four or five, six thousand.

Christopher Wark (31:00.75)

Some of them are still in court. So you may have heard, for example, Monsanto lost a verdict last month for \$1 .5 billion as an example. So some of the, and they won few cases actually. We'll go over that if you want. So Monsanto did win a few cases, but that was, these were the

three cases and how they actually ended and how they Monsanto lost, but they were the stepping stone for the settlements of \$11 billion plus.

Well, you just said a number that kind of blew my mind. 120 ,000 cases plus that, you may 6 ,000, who knows thousands more that are not settled yet. I mean, that is so much paperwork. I mean, that's a lot of people. That's a, that is a massive ordeal. Yeah. I mean, it's not really clear how detailed.

And Monsanto looks at every single case of the 120 ,000, but I presume they do because they have to pay up for each particular case. But oftentimes the way it works, I think, if they offer a settlement for everybody, then that settlement usually gets dispersed amongst the patients that sued Monsanto using a particular formula, depending on their disease, depending on do they have a disease most likely cause or...

is not like how strong is the evidence. I don't know how they allocate the money given to each person versus another, but that is a lot of money. So \$63 billion that they paid to buy \$11 billion to settle. Still, they're going still like ongoing this, like we said, the stock price is down, paying the lawyer fees, all of these things economically, they just don't add up.

to something that's really smart in terms of how Monsanto is conducting business. Not to mention, we're just talking economics, we're not even talking health issues. That's a completely different ball of wax. Well, so a couple things. One, it sounds like they could be pushing a hundred billion dollars when it's all said and done in settlements. I mean, the way it's going now. That's wild. And does it surprise you that

Christopher Wark (33:21.518)

Glyphosate is still legal. I mean, didn't the EU just extend glyphosate usage another five years? Ten. Ten years. It's really, I don't know, I mean, I'll try to, I mean, I don't want to say, I mean, it's annoying, it's disheartening, it's surprising. It gives you a pause as to how things actually work because...

To me, it's a matter of, look, so there's one element of this that is a choice. I think we have learned in America, we respect people's choices. We may not agree with their choices, but we respect their choices. There's nobody that can argue today that smoking is harmful. Yet, if you choose to go and buy a pack of cigarette, you can.

but you're not in denial of the harmful effect. You know, and you that's your choice and I respect that. I don't agree with it. And it took you and I know it took 50 years to even, you know, I mean, doctors were advertising for right. I mean, you know, I mean, my doctor smokes camels. Yeah. I mean, you can go back and look at all of these, right? Yes. But choice is important. You know, I can't force people to do a lot of things, but I can counsel them.

The issue with glyphosate in a roundup is pretty important because a lot of people don't know

and a lot of people assume it's totally safe. A lot of people don't understand how commonly it's used, how all over the grains and crops it is. And there's the sense of denial that maybe might change. But certainly,

there is no choice element here because there is no warning label on the bottle. And if there is a warning label on the bottle and then you choose to ignore everything, I respect that. I wouldn't agree with it, but I'll respect it. And then we'll have to fight the other fight, which is how do we really get rid of it from our foods and environment, but at least let people make an informed choice. So it does surprise me.

Christopher Wark (35:49.71)

But I don't know what else could be done, to be honest. I mean, it's almost becoming an economic battle between both sides at this point, which is really, it's not really pleasurable to say, but I mean, to me, I'm a cancer specialist. I take care of people and I care for patients. So fine, I mean, we thought money, billions, all that stuff, it's all nice and dandy.

Tell me how does this affect Mr. Smith next door? Is he, does he know what's going on? Is he going to understand what's happening? And that's where I'm struggling with. So I did not think that in 2023, 2024, you would just walk into Home Depot and buy it like anyone, especially after the first three wins. And I was really energized. I felt that things will actually be much different, but,

It's sobering to see how things are, unfortunately. Well, there's so much money influencing, you know, influencing the approval and use of toxic pesticides, herbicides, fungicides, life -asset being one of many that are potentially harmful to humans over time. And there's not a whole lot of money influencing against their use. Right.

I mean, you could argue that these settlements, you know, 66, \$70 billion would motivate, would open some eyes, especially in the regulatory agencies. But I feel like the regulatory agencies have been captured. They're heavily influenced by the pharmaceutical companies, by the petrochemical companies. And there's a revolving door, as you know, between

these massive corporations, chemical companies and big ag companies and the agencies that are supposed to regulate them, be it the CDC, the FDA or the EPA. And it's a deep corruption and not easily undone, not easily unraveled. And I think the best we can do is just educate the public. And to just further your example, you know, with cigarettes,

Christopher Wark (38:09.23)

There's a label on this, on the carton. The consumer knows, can read the label and they can choose to smoke or not. But with glyphosate, the consumer can't choose because they don't know if it's in the food they're consuming. Right. And, and, without that labeling, I mean, you know, if anything, it'd be nice to get some labeling, you know, on produce, but something I think the public doesn't know that I'm, that I'm talking about, and I know you are as well. and I don't

know, cause I haven't read your book yet, but.

I think a lot of people, and including myself, were, were under the assumption for years that Roundup and glyphosate were really only sprayed on genetically modified crops. And the truth is, is that glyphosate in recent years, and I can't remember exactly when the date was, I think it was sometime in the nineties, it was approved for use as a desiccant, which means they can spray it on grains, wheat, beans.

before they harvest to kill them, dry them out and then harvest them. So the use of glyphosate really started to skyrocket in the, I think it was the nineties or early two thousands, but please chime in on that. No, correct. And note to self, I need to send you my book. So don't forget to give me your address. I will send you the book as a gift from me. But yes, it was 1996.

when basically, in fact, Monsanto was the one who were able to develop the Roundup ready seeds. And basically Roundup ready seeds are these seeds that are resistant to the herbicidal effects of Roundup. So exactly as you said, you can spray on them before the harvest and things will dry out and you just could let, you know, harvest later on and it's more efficient.

You're not going to really hurt what you're harvesting. You're not going to really kill the plants. You just kill the weeds. So exactly why the use skyrocketed. It was almost, you know, if you're a farmer, right, this is, well, it's great. You know, I can actually spray indiscriminately everywhere. I'm going to kill the weeds. I'm going to harvest. Everything will be fine.

Christopher Wark (40:35.15)

But what that means is that everything that was sprayed is going to end up in our food. And part of me says, well, who cares? But now we know, I mean, maybe who cares back then. And I think we have to accept that science evolves. We also have to accept that science is never a hundred percent certain. You know, it's not always, the case is not always

you know, 100 % beneficial or 100 % harmful. Oftentimes things are just in between and you have to look at things are they net positive or are they net negative? I mean, unfortunately, I mean, I wish things were always black and white. I mean, in science, a lot of things are great. So, so yeah, I mean, we learn we know more today than 1996 or 1997.

There's a lot of papers and lots of scientific articles of the health effect of glyphosate. I recognize that there are other articles that say it doesn't, but as you said, I'm very skeptical about these because of ghost writing, because of the funding source, because of the conflict of interest. And I think that our job is to try to separate the signal from noise, because there's a lot of noise out there and that's our job to try to do that.

Have you spent much time researching the additional harmful health effects of glyphosate besides cancer? Not a lot. I mean, I read, I focused a lot on cancer and specifically on Hodgkin's longforma because that's really where I spent most of the time, especially with the trials. And

there's a lot that, you know, there's not enough hours in the day.

But certainly I read a lot about without delving so much into detail, there's a lot of impact on the microbiome that I have actually seen in terms of bacterial overgrowth. And there has been some data about leaky gut syndromes and things of that nature that could really impact the ability to tolerate certain foods, certain ingredients in the foods that we actually have.

Christopher Wark (42:55.214)

There has been some reports about the possibility of affecting sperm count and whether this might lead to some infertility. Yes or no, I haven't really been able to delve deep into that. There was a recent paper that showed the accumulation in the urine samples of certain pre-carcinogenic compounds that actually came from

prior study that was conducted and that really should be telling, should be really saying something. I have no doubt that there are other effects to glyphosate because of how ubiquitous it is into other health effects and I really believe it is worthy of investigation and I hope others are really looking very deeply into that. My question is, is this going to lead to anything different? And I tell you,

The only way that this will lead to something different, in my view, is to have an alternative.

If you're a farmer, if you're a consumer, one thing is to lay out the problem. That's fine. It's fair. But give me a solution. Because a lot of people tell you Roundup is great in doing what it does. And it is. It does kill the weeds and it's very effective in doing so. So if I'm not going to use that, what am I going to use? How do I do this? Am I going to use my hands? Am I going to use vinegar? Give me an alternative that you believe it's safe.

I think that's going to be key. And I actually think it's an opportunity for entrepreneurs or companies who really want to. The market is there, frankly. I mean, there's clear need. And the only round, the only reason roundup is that, you know, used that often is because there's nothing else to be used. Well, I know there are, there are a number of farmers practicing regenerative agriculture and organic farming and

Christopher Wark (44:59.278)

that are, I would say more conscientious and it is harder and the yields are lower and the margins are lower. It's not as profitable to farm in a cleaner, more sustainable way. But I would argue it is better for humanity as a whole and better for the farmers, you know, in terms of just their exposure, high level exposure to these pesticides and things. And there's a, there seemed to be a fair amount of, you know, a number of experts and researchers that are

a correlating glyphosate use with the increase in autoimmune diseases with, you know, obviously you mentioned the gut microbiome disruption, celiac disease, Crohn's colitis, and who knows what else? I mean, it really could be affecting a lot of people in a lot of ways and we don't

know. And so the good thing here, there is an actionable step here for the individual, which is if you're suffering from a chronic condition,

one of these types of things that we mentioned or maybe something else, chronic fatigue or headaches or just some kind of chronic mysterious health problem, investigate your diet. Shift to an organic diet. Stop consuming processed food, fast food, junk food that's full of artificial flavors, colors, preservatives, and all of these pesticides, fungicides, herbicides. The more you can shift away to a cleaner diet,

the less you are exposed to these potential aggravating, you know, molecules and disease promoters. And so that's, that is a step that any person can take, even if the regulation never changes, the government never does anything about it. And I mean, that's why I appreciate what you're doing so much and the fact that you've written this book and that you're speaking out and educating people, because at the end of the day, we don't, we want the government to do the right thing. We want, we want the agencies to,

crack down on pollution, right? From all sources, right? All the chemical pollution, crop spraying, like all the sources of pollution. But there are things we can do to reduce our exposure to them, even if the government does nothing. Absolutely. And we'll probably have to try to make it easier for folks to be able to do that. Obviously these efforts are commendable and I'm aware of them. I just think sometimes they could be, like you said, the yield is low.

Christopher Wark (47:21.294)

lots of work and things of that nature. So what can we really do to promote this kind of behavior and hopefully make it more rewarding for these folks that are doing regenerative agriculture? I do know a fair amount of people that, you know, they grow their own food for that reason. You know, they have backyard gardens, they have tower gardens, they're sprouting and they're just consuming a large percentage of the food they eat is food that they grew because they just don't trust anybody. Right? And...

What's frustrating is that yeah, there have been reports of organic grains and beans and things being contaminated with glyphosate because of their proximity, right? The proximity of the organic farm to the conventional farm. That's also frustrating. Yeah. Yeah. I mean, we have to recognize, but not everybody could do that, right? I mean, not everybody may have a big backyard, not everybody has the time to do it. I mean, I think...

I agree with you that I'm seeing a lot of this improved behavior. I just don't see this as the practical solution for the masses, right? It may be a solution for a few people who are able to, who have the time, the space, and things of that nature. But still, as you think of practical solutions for a population, it has to be a little bit more practical. And the practicality of things, in my opinion, is glyphosate should not be used. Roundup should not be on the market.

And we should provide and people should try to get organic with as much as they can whenever

they can. Hopefully it should be cheaper with time and there should be an alternative to an alternative with color. I agree. A hundred percent. Well, we're, we're getting close to the end of our interview time. And so I wanted to ask you, are there, were there any other, and I want to make sure people, sure people get your book and read it.

And I'm excited to read it toxic exposure the true story behind the Monsanto trials and the search for justice But were there any other major surprises? Things that you learned along the way that were that are worth mentioning that just really You know that stuck with you that you want to share. Yeah, I mean, I think just learning the legal system Really understanding for example that not all the facts are being presented

Christopher Wark (49:41.198)

in every trial to all of the jurors. It's just not. Number two, I really feel that it is so critical to explain things in a simplified manner to the jury. If you just go down a rabbit hole of being too complicated and start having just very complex, you're just going to lose folks. I mean, you really have to explain it in a very simplified manner. In fact, by the way, this is what inspired me to write a second book that's coming next year, but we'll

That's probably for another podcast, but just inspired me to simplify things because people really want to know in a way that they can absorb. It's not about talking these big words that they really can't understand. I, you know, I was, you know, just learned a little bit about the judicial process. And I think honestly, what surprised me is that,

At the end, that even though you may win these trials, the impact of what happens on the ground may not be immediate. Yes, I mean, like you literally said, so great, you guys won these trials, kudos, congrats. I can still go to Home Depot and buy a Roundup. So what have you really done to us? It's a very, very fair question.

If you had asked me after we won the first trial, I would have said, no way, this is with time, it's going to be gone. And, or at least a warning label. And lastly, there's a lot of negotiations that go back and forth between the defense and the plaintiff, not about money and finances. But for example, they would say, let's say you're the plaintiff and you would say, I want a warning label on this. And they would say, no, we're not going to put a warning label on this. Well, then you have to pay a billion extra, like something.

I'm just making things up. But it's really negotiations and mediation. And in my mind, I'd like to have patients and advocates as part of this process. These are just lawyers talking to each other and mediating. And you wonder, should this process really involve advocacy groups who really speak on behalf of the patients? Yeah, I think so. I don't think they are involved in the mediation process. But

Christopher Wark (52:06.542)

I think these are just kind of snippets of what I've learned. Well, I want to thank you again for, for

all of the work that you contributed to those trials. I, even though we haven't seen much change in the use and sale of Roundup and glyphosate, at least now we can bring this proof to the public, which you have done and you are doing, and I'm trying to do, you know, just to change minds.

on the individual level, on the sort of the grassroots ground floor level of consumerism. So that when people understand, Hey, I, Monsanto lost these cases. They've paid billions of dollars because of the links to cancer from glyphosate roundup. Like maybe you should avoid it. Right? This is, this should be sufficient evidence for you, you know, Joe consumer.

to avoid this product at all costs. And so I'm at least encouraged by that. That to me feels like some, you know, arrows in my quiver in pleading my case for people to eat healthier, make better choices, avoid toxic chemicals and things like that. Are you hopeful for the future? Cautiously optimistic. I mean, I hope so. I mean, I think that we will take any small win that we can get and we do get a few wins here and there.

so I will remain cautiously optimistic. I'm a cancer specialist. So being optimistic is in my nature. That's great. So, where can people find you and follow you? well, so I had my own podcast, as you know, it's called healthcare unfiltered. it's everywhere podcasts are available and I have it on YouTube as well. my channel is Shadi Nabhan and healthcare unfiltered. They can check out my website, ShadiNabhan .com.

And the book, Toxic Exposure, as you mentioned, Chris, is available everywhere. It's published by Hopkins. It's on Amazon, Barnes and Noble, anywhere folks consume books. Perfect. We will link to all those resources in the show notes, folks. So you can click below the video on YouTube or check out the show notes if you're watching this on ChrisBeatCancer .com or if you're in the podcast. So make sure that you can connect with and find and follow and learn from Dr. Chaddy Nabhan.

Christopher Wark (54:31.662)

And I am so pleased that we did this interview. I can't wait to share it. it's just really important information. And again, thank you so much for the work you're doing. It really means a lot to me as a cancer survivor and patient advocate, right? That there are people like you on the front lines that really are fighting to make our world a better place to clean up our environment, and to punish the polluters. Thank you, Chris. I really appreciate your interest and taking the time to speak with me.

Thank you so much. It's been really great. Thank you everybody. Thanks for watching. Please share this video with people you care about. Help us spread this important message. Lysate and Roundup are toxic and you're better off without them in your life and your body. And I will see you on the next one. Bye bye.