

Chapter 1 - The Parents Guide to the Myths of Safe Pesticides

Andre Leu: Thanks, Alan and it's really great to be back. Look, what I wanted to say, one of the things I regard about Gippsland, this is to me Victoria's equivalent of the Daintree as one of the incredible, biodiverse regions of our continent, and on the planet actually. And very unique that here at Gippsland, the mountain ash forests, they are the largest flowering plants in the world. But actually, for a long time, we're in the 70s. if you got the Guinness Book of Records, the biggest tree in the world that ever existed was here in Gippsand, called the Surveyors Tree. What we did in Australia (though) was we cut down all our biggest trees and now the Americans have that (record). But the Americans don't like to admit that we actually had the world's biggest tree so they've actually made sure that the Guinness Book of Records have taken it off now, so it doesn't exist. But if you want to look it up it's called the Surveyors Tree and, in those days, it was 1970s so things were in feet, it was about 520 feet, which is about 30 meters higher than the tallest tree that exists on the planet today.

All right. Now to move from trees to people and pesticides and this is for me a very important issue. This is actually my second book. (Poisoning Our Children) My first book was called The Myths of Safe Pesticides and I go through some of these myths to debunk the so-called regulatory science around pesticides. But while I was writing that book and researching it, I learnt something that I regard as really important. Firstly, I discovered there is absolutely no peer-reviewed science on the safety of pesticides for children.

And as I further investigated, I actually realized we have hundreds of very good scientific papers that actually show there is no level that is safe. None, zero is the safe level. You know these so-called small levels are very, very dangerous to children and I will talk more about that soon.

Okay, first a little bit about my new position. Until last year I was the president of IFOAM (International Federation of Organic Agriculture Movements) now I'm involved in a new organization called Regeneration International and we're looking at farming systems, food and farming systems, because we really believe that we need to reconnect consumers and farmers, connect food and farming instead of having long supply chains, but also we want to look at regenerating, stabilizing climate systems. We're actually promoting how farming and organic farming is where we started to promote how that can actually both mitigate and adapt to climate change by building up soil organic matter. And then the other really important issue for us is the health of the planet, people, communities, culture, locals' local economies, democracy particularly at the moment with some of our so-called Democratic leaders are getting around the world and I think one thing that wouldn't hurt the planet at the moment is a bit of peace.

This is the book I wrote anyway, we've got real copies of it there. I'm really happy for you to actually buy it from here than going online. It's a lot quicker and you know, the reason I'm happy for you to buy it here is that the money goes to the Organic Agriculture

Association which you know, I'd rather go to the Organic Agriculture Association than get it through Amazon and give money to the world's richest person. Jeff Bezos doesn't need any more money. There's a lot of other people could do with some so we need to share it around.

All right, so let's talk about what is happening on the planet at the moment and the World Health Organization is talking about the epidemic of non-communicable diseases.

And I've quoted that you know, that that's their quite there, the non-communicable diseases such as heart disease, stroke, cancer, respiratory diseases, diabetes, you actually go on and on and on and the thing about these diseases is that you don't catch them by sitting next to somebody in the train. You know, if someone's got cancer and you're sitting next to them, you're not going to get cancer or kidney disease or liver disease.

These diseases come from environmental and lifestyle causes. And what that means, and this is the really important thing, what it means is that we can prevent these diseases by removing these environmental and lifestyle causes. It's very, very doable. Now it's quite a few things: junk food, lack of exercise, we can go on and on and on. I want to talk about the role of pesticides. Pesticides aren't the only chemicals we know that are involved. Many of the chemicals that that we have in plastics, in dishwashing fluid are also involved. I've written this distinct focus on pesticides, but chemicals generally tend to be very bad news and we have more and more science on it. I want to go into the myths.

And myth Number One is here all the time. All the chemicals are all scientifically tested, rigorously tested so it's safe, you don't need to worry about them. You know, the regulatory bodies say we've reviewed the science and made the decisions on that and so, you know, don't worry. No need to eat organic food, you know, because the normal everyday nice unblemished food you get from the supermarket is perfectly safe. I think actually it is another issue when we talk about problems like this. At the moment everybody's talking about plastic and plastic is a problem because it's in particular terms of its toxicity and they're not so much talking about that, they're more concerned about the visual pollution and maybe the turtles and things, the jelly fish and eating them. The big trouble about this is you can't see this pollution. It's invisible because it's so small, but it's so powerful. So, what I really wanted to start with is where this is the biggest myth. In fact, it's more than myth, it's an outright lie when what farmers use are formulations of chemicals. A pesticide that you buy is not just one chemical, might have an active ingredient called malathion, but you've actually got solvents, you've got surfactants and a whole lot of other chemicals mixed into it and they're in there to actually make these chemicals work more effectively.

In other words, it makes it more toxic. A poison works better it's because it's more poisonous, you know, but in terms of regulation, all the pesticide company needs to do is nominate one of those ingredients and that one might be actually less than 1% of the total mixture and it might not even be the most toxic.

A lot of the solvents, petrochemicals could be far more toxic and, in many ways, as most of them are actually carcinogens. We have very good evidence but that all gets ignored. So, while that's tested and I'll talk more about that later, that the testing they do on that one

nominated chemical is completely inadequate and also in many ways fraudulent. The big thing here is to just test one and then you mix all these other toxic chemicals with it and so it'll be no difference in the toxicity now. That's what we call a data free assumption; there is no evidence-based data to say there is no difference in toxicity. Common sense would say there is going to be a difference in toxicity and I can tell you that the independent, peer reviewed studies done by independent scientists and published in the scientific journals are peer-reviewed, that's the gold standard of science, will show actually in many cases these things are up to a thousand times more toxic, not one or two times. So, what I want to get across here is that this decision to say that the chemicals they use in farming are rigorously tested is not true.

Now some of them what they tested for is acute (effect?) to develop. So, looking at what a chemical does over two weeks or formulation in two weeks, tells you zilch So the fact is, if we start looking at registered chemicals, I put out that the USA has registered 1400, Europe actually has less.

We have 7,200 registered chemicals that were used in farming and not one, not one is tested for one of the long-term diseases. it is zero, that's the truth. And so particularly startling is things like children's health reproductive effects, birth defects, cancer. We can go on and on and on, all the different things that they should be tested for and there is zero by regulatory authorities. I go on in the book. I show where independent researchers have published the testing in reputable scientific journals and that shows how dangerous these are. There's a really important study by Professor Seralini and this particular study is the only peer-reviewed, lifetime study of a formulated pesticide testing an animal, in rats looking at the normal types of levels that we as humans and even less than what we have in our bodies, to see what is the effect of these small amounts of pesticides over your lifetime, not two weeks. Over a lifetime because we're expected to have these things in our bodies our whole life.

The truth is now that we know how to test for glyphosate, in this case Roundup. There's rarely a person that we're finding without it. Most breast milk has it crosses the placenta. Most people's urine will have it. It's the new DDT. It's everywhere in the environment. Saying it biodegrades, breaks down, that's rubbish and now that we can test. We actually find these very different. So, in this study, actually they did Roundup. They did one GMO and then the combination of the Roundup and GMO because it's Roundup Ready because what Professor Seralini wanted to understand is, what was caught looking at other stages, what is causing the damage to livers and kidneys?

Now was it the Roundup by itself? Was it the GMO, was it the combination compared to the controls that weren't treated. You actually found all three do it compared to the controls. So, you know one of the really concerning things is when with the female rats every single one of the treated ones ended up with mammary tumours. That's what we're seeing here which is as humans, we actually cause breast cancer. There's one, there's one right there. The female rat didn't have a mammary tumour that's because she had ovarian cancer.

I'll go to the next slide here and you have the controls of the liver and the kidneys and they look normal. And now you when you start looking at the livers and kidneys of the treated ones with the GMO, the Roundup and the combination of GMO and Round Up, you can

actually see the damage being done to these tissues. And we're talking here not parts per million but parts per billion, small amounts over your lifetime. The word we use actually are environmentally relevant. Now, this is the only study of one formulated pesticide in the world. They did their best to suppress this and kill it and they actually got it retracted. Monsanto maneuvered to get it basically retracted from one journal and in the end it got republished another journal, but it was in that time the actual editor of the journal retracted it and Monsanto personally put on the editorial committee. They all got sacked and now I think for the Monsanto papers from the court case is over people getting Non-Hodgkins lymphoma from Roundup in the United States it as actually come out how Monsanto engineered to try and discredit Seralini and can I say that this is still happening?

I'm involved when the speakers in the first African Conference in 2019 was going to be in Nigeria on pesticides and the Nigerian host people refused to allow Professor Seralini to be a speaker. Thankfully the organizers had the scientific integrity and they moved it out of Nigeria to Kenya, to Nairobi because they weren't going to allow this sort of politics. But I can tell you that they are still trying to discredit this scientist because of this. They don't want to see any more studies like this coming out because it would be very dangerous if people knew the truth about pesticides.