

Interview

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In an interview with the Tagesspiegel, BfR President Professor Dr Dr Andreas Hensel discusses the discrepancy between how health risks are perceived and how they are scientifically assessed.

Source: "Interview with risk researcher Hensel: 'People are afraid that they are being slowly poisoned'", Heike Jahberg, tagesspiegel.de from 25.08.2023; <https://www.tagesspiegel.de/wirtschaft/risikoforscher-hensel-im-interview-die-menschen-furchten-schleichend-vergiftet-zu-werden-10358746.html>

Interview with risk researcher Hensel: "People are afraid that they are being slowly poisoned"

Pesticides in strawberries, cancer from the sweetener aspartame: these kinds of reports create unnecessary panic, says Andreas Hensel, President of the German Federal Institute for Risk Assessment. Hysteria is not the answer.



About

Andreas Hensel (62) is a qualified veterinarian, microbiologist and hygienist. In May 2003, after an academic career at universities in Hanover, Utrecht, Vienna, and Leipzig, the scientist, whose fashion trademark is the bow tie, became the first president of the then newly founded German Federal Institute for Risk Assessment (BfR) in

Berlin.

The BfR was founded in response to the BSE crisis as part of a new approach to consumer health protection and food safety. The institute provides scientific advice to the federal government on questions of food, product, and chemical safety, and consumer health protection. The institute conducts its scientific evaluations and research on an independent basis.

Mr. Hensel, environmentalists are warning us about pesticides in strawberries, the World Health Organization (WHO) has deemed the sweetener aspartame to be carcinogenic, and the BAU trade union is sounding the alarm about asbestos in

homes. We've heard nothing from your institute, even though you are legally Germany's highest-ranking czar for risk. Why?

Yes, we have only ever issued one warning. That was during the EHEC crisis in 2011, when our institute identified and evaluated fenugreek seeds as the cause of that crisis.

The bacteria cause severe, bloody diarrhea and have resulted in deaths. In your opinion, has there been nothing to warn about since then?

It is not our job to issue warnings, but rather to provide scientific assessments. We advise political decision-makers on the health risks posed by particular substances or microorganisms.

We say how much of a substance you can consume in one sitting, in one day, and throughout your life without getting sick. The state must protect its citizens, and we provide the scientific basis for this. You can read all about this work on our website and by following us on Twitter and Instagram. We publish new findings every day.

What about strawberries? BUND (BfR comment: an environmental NGO) tested strawberries and found pesticides in almost all samples, often four or five pesticides in a single sample. That can't be healthy!

These kinds of reports are pure alarmism and scaremongering. People are afraid that they are being slowly poisoned. And now by the strawberries too! Unfortunately, the media plays a big part in this because they print these messages without checking them according to the motto: "Bold claims get more attention." The pesticide residues found were all far below the permitted maximum levels, and there was no health risk.

In the middle of strawberry season, we were getting calls from concerned mothers asking if they could still give strawberries to their children. That's absurd - strawberries are delicious and wholesome. Don't ask whether a substance was found in a food, but in what quantity and concentration and whether it poses a health risk. But the study said nothing about this, which I think is telling. Instead, people are being manipulated. Fear is a poor advisor and leads to disproportionate reactions: children are no longer eating strawberries.

Parents want to protect their children and prefer to play it safe. Surely that's understandable?

I can assure you: before a plant protection product is approved, it is checked very carefully to determine whether it is harmful to the environment or poses a risk to human health. Residues are formed even when used as intended. This is unavoidable, and it is not a risk per se.

Two out of three Germans believe that such residues are illegal. But that's not the case. Before a plant protection product is approved, the BfR carries out a comprehensive health assessment of the plant protection product and its maximum residue levels. These are the maximum concentrations permitted in food of the active substances in plant protection products and their decomposed parts.

How do you conduct this assessment?

Determining the maximum residue levels involves analytical considerations and the so-called ALARA principle. That's an abbreviation of "As Low As Reasonably Achievable", which means that the maximum residue levels are as low as reasonably achievable. For each product, these levels are usually much lower than the levels that would be relevant to our health. Therefore, there is no health risk to consumers.

But I don't just eat strawberries, I also eat blueberries and lettuce. And there are pesticides everywhere...

I prefer to talk about plant protection products because the products are intentionally used to protect the harvest. All plants naturally contain pesticides, i.e. toxic agents that they use to protect themselves from predators. You can smell and taste them in spices, onions, chilli, and many other plants.

Whether it's a pesticide or plant protection product, doesn't that stuff collect in my body?

There is not a single piece of evidence that anyone in Germany has been poisoned by food containing plant protection products. But many people are still scared.

Many are switching to organic to avoid plant protection products.

There are plant protection products in the organic sector too. Yes, these substances, such as copper, are "natural", but they are also toxic in high enough doses, otherwise they would not kill the harmful organisms. And whether organic or not, it is part of good agricultural practice to use several agents when necessary that are suitable for the specific situation in order to combat as many harmful organisms as possible. Taken together, this can mean a lower dose of plant protection products than when using just one agent at a higher dose.

Contrary to what the strawberry study suggests, a lot of agents does not automatically mean a lot of poison. But that is not conveyed clearly to people. When it comes to safety, the law does not differentiate between different forms of production. You certainly can't tell how a product was produced by looking at it, nor can you analytically differentiate between different production forms.

The EU Commission wants to halve the use of pesticides by 2030. NGOs are clearly not the only ones who are skeptical.

Farmers use plant protection products to produce good products at low prices. It is not possible to make a blanket statement about how much they can reduce this use. What is perhaps possible with grains or sugar beets is much more difficult with permanent crops like vines or fruit trees.

The growing of wine grapes uses 70 to 80% of all plant protection products. People get upset about pesticide residues while sipping a nice glass of red wine. They prefer to ignore the fact that around 12% of their wine comprises the chemical ethanol, i.e. alcohol, which the International Agency for Research on Cancer has classified as an obligatory carcinogen. That's a paradox.

But if you drink or smoke regularly, you don't want to eat or drink plant toxins too.

If you smoke, you don't need to worry about the health risks from residues of plant protection products. The harmful effects are so much greater that they overshadow all other long-term toxicological effects. We therefore need better education about the real risks.

Where are these risks, in your opinion?

Even if nobody wants to hear it: when it comes to food, the most dangerous place right now is the kitchen. Europe is currently experiencing another salmonella outbreak, in Austria there has already been one death due to salmonella in chicken. Few people are interested in that.

But imagine what would happen if just one person in Germany were to die from plant protection products. According to official figures, more than 100,000 people in Germany contract food poisoning every year. However, the number of unreported cases is certainly ten to 20 times higher because many do not go to the doctor.

Salmonella has been practically eradicated in Sweden. Why isn't that possible in Germany?

The Swedes have been working for 40 years to eliminate salmonella from their livestock. They have largely succeeded. However, one cannot speak of "eradication". What it means is that, as soon as they journey south and eat something raw with salmonella, their risk of getting sick increases. In contrast, we like to eat raw minced pork and are repeatedly exposed to these bacteria. We can therefore tolerate small amounts without getting sick, because this is how immunity to infection develops at a young age.

What about the sweetener aspartame, how dangerous is it?

This topic comes up every year. It's a real perennial. People have a vague feeling that the substance must be harmful, but it's still allowed. They ask themselves how that can be. But it just is. Every risk assessment agency in the world and the responsible

entities in the WHO, the JECFA, say that aspartame is safe in the amounts that we consume.

And why does the cancer organization of the WHO sees it differently?

We know that already from glyphosate. This organization, the IARC, scours the literature for evidence that a substance may be toxic. But it avoids the crucial question, namely how much of the substance you actually consume. But that's important. Whether a substance poses a health risk to you depends not only on the substance itself, but also on exposure, i.e. how much of it you consume.

Even innocuous foods such as grains often contain lead and cadmium, which accumulate in the body. Vegans and vegetarians are more exposed to these heavy metals because they eat more grain products, comparatively speaking. Therefore, in our BfR MEAL Study – that's Germany's first total diet study – we prepared more than 300 foods and dishes exactly as people in Germany typically do and then tested them in the laboratory for a wide range of substances including mold, heavy metals, pesticides, and minerals.

What did you find out?

The MEAL Team is currently evaluating the results of more than 140,000 analyses. The results evaluated so far confirm that food is safe in Germany, even for population groups that particularly need protection, such as children or immune-compromised people, if they eat a normal diet, i.e. a balanced and varied diet. According to the current scientific knowledge, this applies to aspartame too.

We should beware of hysteria. The fact that many people get cancer is not so much due to food or chemicals, but rather because we are getting older. An estimated four out of five cancer cases are caused by factors unrelated to lifestyle.

Some people warn, while you say there is no warning to give. Aren't you afraid of being seen as someone who only downplays and denies?

Yes, that's how we're often seen, but not by the people we advise! Counter question: why should you believe, for example, Foodwatch or BUND more than us? We have a statutory mandate to present the scientific facts to the federal government exactly as they are.

What you see on our website is the current state of science and technology. If we find something that poses an immediate health risk, you can count on us to sound the alarm – we'd be the first to do so! And by the way, no one could stop us from doing so, the voice of science is not subject to that kind of supervision. The Bundestag has given us this independence by law.

Is there anything that scares even you?

I can't live a risk-free life. I have to breathe, eat, and experience things. I'm not afraid though. If you want to avoid every risk, no matter the cost, then you end up being completely incapacitated and paralyzed, and can no longer enjoy life! In the end, that's the much bigger risk...

This text version is a translation of the original German text, which is the only legally binding version.