



Combatting Glyphosate Exposure with Soluble Zeolite

Daytime television watchers in the United States may have noticed a new trend: ads for law firms aimed squarely at potential victims of glyphosate poisoning. That's no accident. Over 4,000 cancer patients currently have lawsuits pending against agri-corp giant Bayer/Monsanto, maker of RoundUp and other products that include glyphosates.

School groundskeeper Dewayne Lee Johnson was the first to successfully sue the company, winning a \$289 million verdict after a jury determined that Monsanto had failed to warn about the carcinogenic effects of RoundUp. Johnson suffers from Hodgkin's Lymphoma, a disease frequently linked to glyphosates. A separate jury ruled in favor of 70-year-old Edwin Hardeman to the tune of \$80 million. Hardeman, who also has Hodgkin's Lymphoma, used the product for over three decades to control poison oak on his two California properties.

Global Glyphosate Bans and Restrictions

While the tide seems to be turning in America, the nation still lags behind the rest of the world in recognizing the inherent dangers of glyphosates. In September 2019, Germany announced that it will phase out the herbicide, with a plan to ban it altogether when its EU approval period expires in 2023. Use of the controversial weed killer is already prohibited or restricted in 17 countries, including Denmark, Austria, France, the Netherlands, Malawi, Sri Lanka, Vietnam, Italy, Belgium, the Czech Republic and Bermuda. Six Middle Eastern Countries coordinated a collective ban on the substance in 2015 and an increasing number of U.S. cities and counties have followed suit.

Health Impacts of Glyphosate

In 2015, the World Health Organization's International Agency for Research on Cancer (IARC) concluded that "Glyphosate is probably carcinogenic to humans." Independent studies have consistently shown a link between exposure to herbicides containing glyphosates and a range of health issues, including skin tumors, renal tubule carcinoma, pancreatic islet-cell adenoma, kidney disease, and a doubled risk of birth defects among children born to mothers living near fields where Round Up is sprayed. Glyphosate levels have also been linked to autism and Attention Deficit Hyperactivity Disorder (ADHD).



It also functions as an endocrine disruptor, interfering with the bodies' hormone signaling pathways. Within our gut biome, it attacks healthy and necessary bacteria while having little impact on harmful bacteria like salmonella, which is resistant to it. Studies have found that glyphosates may interfere with our ability to absorb antibiotics, rendering them less effective at fighting disease and infections. Further studies also suggest the herbicide could prevent proper absorption of minerals, resulting in mineral deficiencies that can lead to conditions such as chronic kidney disease.

Who's at Risk

Clearly, those who work in the agriculture industry are more at risk for glyphosate exposure than the general population. Professional gardeners, landscapers, farmers, agricultural workers, herbicide applicators and groundskeepers tend to have higher levels of the toxin in their systems.

However, that doesn't mean that everyone else is safe. In the U.S., glyphosate is by far the most widely used pesticide and a 2017 study found that Americans' exposure to glyphosate has increased 500 percent since 1996, when Roundup Ready crops were introduced across the country. 2016 data from the U.S. Department of Agriculture showed detectable pesticide levels in 85% of more than 10,000 foods sampled, and an eye-opening 2017 birth cohort study of pregnant women in Indiana found detectable levels of glyphosate in more than 90 percent of the women tested. The same study found that glyphosate levels significantly correlated with shortened pregnancy lengths.

With 1.8 million tons of glyphosate applied in the U.S. alone since 1974 and 9.4 million tons sprayed worldwide, avoiding the chemical is not an option, even if you eat only organic produce. Glyphosates can also enter our systems when we breathe it in or absorb it through our skin. So what can we do to minimize or reverse its harmful effects?

How Zeolite Interacts with Glyphosates

Zeolites have long been widely used to treat contaminated wastewater due to their ability to adsorb heavy metals and other substances. The mineral's open-framework structure, large cavities and negative magnetic charge all make it an excellent and low-cost option for both wastewater treatment and soil conditioning.



Different forms can also be used to combat air pollution. A 1998 technical bulletin from the Environmental Protection Agency reported, “Hydrophobic zeolites can be very efficient at adsorbing and desorbing VOC [Volatile Organic Compounds] . . . Zeolites can be used over a wider temperature range than carbon and are generally superior to carbon as an adsorber.”

Within the human body, soluble zeolite is highly effective at removing heavy metals and other toxins, even those that are typically too small to be eliminated by other detox methods. First, its magnetic charge attracts glyphosate molecules, which are described as ‘polar’ because they have a positive charge on one end and a negative charge on the other. The same charge that makes glyphosates so effective at sticking to the soil now works against it, trapping it within the honeycomb-like structure of zeolite. As more particles are drawn together, the collective becomes large enough to be passed through our bodies in the form of urine, feces or sweat.

Conclusion

In the modern era, avoiding glyphosates altogether is not an option. As long as you are eating, breathing and going outside, odds are you will end up with some level of the toxic compound in your system. However, that doesn’t mean it has to stay there. Soluble zeolite is a safe and effective way to rid your body of glyphosates as well as many other toxins. Meanwhile, if you believe your health has been seriously compromised by glyphosate exposure, the upside: there are plenty of attorneys waiting for your call.

References

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