

Alarming Information About Our Roundup-Sprayed Crops

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Many of us have used "Roundup" to kill the resistive weeds on our sidewalks and gardens. New research exposes serious effects from the build up and global use of this very toxic herbicide.

In recent years veterinarians have been cautioning us about Roundup, the common name for glyphosate, due to the reduced fertility and increased abortive rate of animals who are fed grain treated with Roundup. Cattle, sheep, poultry and hogs are not reproducing at normal rates. Glyphosate has repeatedly been detected in the urine, feces, milk and feed of the animals. Even more alarming, glyphosate was detected in the urine of farmers.

In a recent German university study, the urine of city workers, journalists and lawyers who had no direct contact with glyphosate were examined for glypho-



sate contamination. The upper limit for glyphosate in drinking water is 0.1 ng/ml. The study found glyphosate in all urine samples at values ranging from 0.5 - 2.0 ng/ml. That's 5 to 20 times the limit for drinking water.

In an interview with Dr. Mercola, Dr. Don Huber discussed the chemistry and the insidious dangers of this common herbicide. Dr. Huber has spent 55 years studying soil-borne diseases, microbial ecology, and host-parasite relationships. He describes that "... herbicides or pesti-

cides are metal chelators. That's how they perform their function as an herbicide, by immobilizing an essential nutrient that is required for a specific enzyme."

In the chelation process, an essential nutrient is immobilized which weakens the weed and ultimately the soil organisms kill the weed. Dr. Huber emphasizes that "nutrients aren't just required by the weed, but they are required by microorganisms. Nutrients are also required by us for our own physiologic functions. If a nutrient is immo-

bilized, it may be present, but it's not necessarily physiologically available in the same efficiency that it would have been if it wasn't chelated with glyphosate or other chemical chelators. Understanding that "even if the nutrient is present in the plant; it may not be bio-available for animals or humans" is what really got my attention.

Dr. Huber went on to emphasize that the genetically modified plants themselves are affected and cannot absorb and translocate nutrients. Then when you apply glyphosate, it causes a further compounding effect in reducing the nutritional value of the plants. This occurs with amounts as low as a one half-ounce per acre. Currently, farmers apply 140 times that amount. The plant is compromised in its ability to accumulate and store nutrients for its own use as well as food for us and our animals. So it's a twofold effect; the gene reduces the plant's ability to uptake nutrients and then the glyphosate, when applied further, inhibits the action of specific minerals.

The pesticide is not just located on the leaves of the plant but in all the growth points, and in the food that our animals and we ultimately eat. Roundup is also being used as a ripening agent to speed up the harvest process and as a result it goes right into the seed. About 20 percent of the pesticide moves out of the roots and into the soil. It has the same effect on many of the beneficial soil microorganisms that it has on weeds. Remember it's the microorganisms that kill the weeds. Beneficial soil microorganisms are necessary to convert nutrients into a form that the plant can absorb. Manganese and Iron have to be reduced for many plants.

We also have microorganisms for legumes like soybeans, alfalfa, peas, or any of the other legumes that convert or fix nitrogen from the air into amino acids and ultimately protein. This process is dependent upon the microorganisms in the soil. Glyphosate is extremely toxic to all of those organisms. What we see with our continued use and abuse of this powerful pesticide is the total elimination of many of those organisms from the soil.

The crops that are genetically engineered to tolerate Roundup are our major crops: corn, soybeans, canola, and more recently alfalfa. Dr. Huber also commented that animals are experiencing premature aging. A study was conducted at the University of Iowa between GMO and non-GMO fed animals. Two and a half year old GMO fed animals showed the aging patterns of 10 year old animals. Just remember, studies are finding 5-20 times the amount of glyphosate in the urine of people NOT associated with agriculture.

Dr Huber made the comment that he believed DDT was safer than the abusive use of glyphosate. WOW, that's a strong statement. But I think it's pretty obvious that if these things are happening to animals it's likely we are unknowingly also being affected. It's a topic for further consideration, but I think you will agree that any patient that is not responding to your care should be encouraged to avoid any GMO foods and eat organic.

Thanks for reading this week's edition of the Tuesday Minute. I'll see you next Tuesday.