

# Technology as Servant

## AVOIDING GLYPHOSATE IN FEMININE HYGIENE PRODUCTS

By John Moody

Some startling news interrupted and superseded my original plans for this column with its urgency: a recent Argentinian study has found glyphosate in tampons.<sup>1</sup> Now, this news in itself, while galling, did not surprise me. Cotton, after all, was one of the first genetically modified (GM) crops, is one of the heaviest consumers of industrial agricultural chemicals—in particular, the herbicide Roundup, whose active ingredient is glyphosate—and is used in a wide variety of personal care products, from cotton clothing to cotton swabs. Cotton is, by percentage, the most prevalently grown GM crop in the United States and 96 percent of all cotton grown in the U.S. is GM cotton.

What surprised me about the finding was the apparent lack of concern in the social media reaction to this revelation. Do most people truly not understand that glyphosate isn't "just" a food problem (and a most sinister food problem, at that)? Do most people truly not care that government agencies have abnegated their obligations to protect citizens from toxic agricultural chemical exposure in something as intimate as feminine hygiene?

A bit of human physiology is good to elucidate at this juncture: human vaginal tissue is nearly perfect in its ability to rapidly and completely absorb substances that come in direct contact with it. This means that glyphosate in tampons and other feminine hygiene products will be readily absorbed through the vaginal walls and directly enter the bloodstream. This pathway to the bloodstream is more direct than if the glyphosate were consumed in food. Stop to consider this fact for a sobering moment or two.

It is useful to remember that when glyphosate was first introduced its makers assured the public and regulatory agencies that their product was rapidly "biodegradable" and therefore safe. In 2007, however, Monsanto lost a major lawsuit

in France regarding their misleading claims and advertisements as to glyphosate's alleged—and since disproven—claims of rapid biodegradability. The chemical giant was "punished" with a paltry fine for its perjury. During the early 2000s, glyphosate was discovered in everything from commercial baby formula to human breast milk to *in utero* human fetuses. Most recently, the World Health Organization has classified glyphosate as a probable carcinogen.

Another thing that surprised me on the social media sites was those who argued that discovering such chemical contamination wasn't a big deal. Don't these people grasp the concept of bioaccumulation of toxins? Don't they realize that along with being a probable carcinogen, glyphosate is also an antimicrobial, and we are finding it in all sorts of places that harm the sensitive microbiome of our bodies and our babies' bodies? (For more on this side of the subject you can check out my executive column at [farmtoconsumer.org](http://farmtoconsumer.org)).

In light of all of the above, it made sense to me to focus on this topic in order to give readers alternatives to standard personal care products, especially for feminine hygiene. It is also worth a reminder that glyphosate is just one of many disclosed and undisclosed contaminants in these products. Companies have only very recently provided users with a measure of transparency about their products.<sup>2</sup> Just because a product doesn't contain glyphosate doesn't mean it is not contaminated with other toxic agricultural residues, plastics or processing toxins.

### FASCINATING AND FRIGHTENING

When you begin to look into the studies on glyphosate, you become very alarmed very quickly. Here are just a few gripping highlights: Humans who eat a conventional diet have the highest levels of glyphosate detected in their

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urine, and people who are the sickest have the highest rates in this group. Crops have been found to contain far more glyphosate than expected at harvest. Glyphosate has been found to alter the gut microbiome, along with affecting key enzymes and other biological activities.<sup>3</sup> Researchers stated, “we show that glyphosate is the ‘textbook example’ of exogenous semiotic entropy: the disruption of homeostasis by environmental toxins.”

This so-called biodegradable herbicide has a half-life of forty-seven to one hundred seventy-four days in the soil. If it gets into water or air, it is resistant to breakdown by water and sunlight, increasing its persistence. In some studies, scientists have found that a big selling point for the pesticide—that it binds tightly to minerals in the soil, like calcium, boron and manganese, thus preventing runoff—also means it competes with plants for those nutrients. Other research indicates that glyphosate can alter the mix of bacteria and fungi that interact with plant root systems, making them more susceptible to parasites and pathogens.<sup>4</sup>

#### SAFE ALTERNATIVES

Since I am not entirely qualified to speak of feminine hygiene products and their applications and effectiveness, I enlisted a little help to conclude this topic with credible first-hand experi-

ence and advice. Two female friends agreed to share their strategies in finding safe alternatives to the conventional products widely available. Note that there is no single solution that will be preferable for all women. Luckily there are many creative options to explore that include both do-it-yourself solutions as well as safe alternative brands to purchase.

My friend N.F. shares her experience: “I started using cloth pads for menstruation, but I have a heavy flow and needed a lot of them, which wasn’t very cost effective for me. I tried the DivaCup [see below] and never found it comfortable. I also found it pricey and it was completely unusable after my first baby, which meant I would have to replace it with at least two new ones after each baby. I was also hesitant that it was made with plastics and silicone. I wanted something more natural and cost effective. So, I use sea sponges for menstruation. I sew natural, unbleached wool string through them for easier removal. Since I started using them, I’ve had two additional kids and have had no “fit” issues. I have found these to be usable even when out and about if I have reusable, water-proof snack bags on hand. I have a lot of these bags and label them for multiple purposes: the kids’ snacks when we are out, used wet wipes (repurposed baby wash cloths), my feminine products, soiled cloth diapers. These all get washed with the cloth

#### ALTERNATIVE BRANDS OF FEMININE HYGIENE PRODUCTS

##### SEA SPONGES:

[seaspongecompany.com/products/sea-clouds-sea-sponge-tampons](http://seaspongecompany.com/products/sea-clouds-sea-sponge-tampons)

##### REUSABLE MENSTRUAL CLOTHS:

Glad Rags and Luna Pads (be sure to get the organic cotton versions!). Many women also make their own menstrual rags and you can easily find do-it-yourself directions online ([gladrags.com](http://gladrags.com) and [lunapads.com/lunapads](http://lunapads.com/lunapads)).

##### MENSTRUAL CUPS:

Keeper and DivaCup ([keeper.com/learn-more/questions](http://keeper.com/learn-more/questions) and [divacup.com](http://divacup.com)).

##### ORGANIC COTTON TAMPONS AND MENSTRUAL PADS:

Natracare, the world’s first manufacturer of alternative feminine hygiene products, was founded in England twenty-five years ago by a woman appalled by “the unconcerned response of the international feminine hygiene brands” to the pollution in their products ([natracare.com/products](http://natracare.com/products)).

##### BYE BYE BRAS:

Most bras are made of a mixture of highly processed cotton and synthetic fibers. They can impair circulation and other body systems. The good news is that some studies and lots of women’s experience have shown that bras are unnecessary and even counterproductive to breast wellness.<sup>5</sup>

diapers, so they all go in the diaper pail. I make powdered laundry detergent using castile soap, soda ash, a bit of borax, a bunch of salt and tea tree oil. I use vinegar in the rinse cycle and wool balls in the dryer.”

Here is another approach from my friend K.L.: “The DivaCup is an amazing and life-changing alternative to the chemicals in tampons and pads, which many women are not even aware of. The DivaCup is an eco-friendly feminine care product that works amazingly well! It is a small silicone cup that is inserted into the vagina. When it fills with blood you remove it, dump it out, and reinsert. It works better than any pad or tampon, and you cannot even feel it. The cup comes in different sizes for teens and adult women.

“You can carry on with your usual activities, and not worry about the uncomfortable feel of some of these other products. The best part is that it is made with silicone, and does not contain any of the following: latex, plastic, PVC, acrylic,

acrylate, BPA, phthalate, elastomer and polyethylene, and is free of colors and dyes. Silicone products have been shown to be biocompatible (i.e., accepted by the human body without adverse reaction). Another great feature is that you can see exactly how much you are bleeding each cycle, and be more in tune with the flow of your body.

“Luna pads are another great alternative to chemical-laden pads. They are more comfortable and eco-friendly. You wash them with your laundry. By choosing to use washable and reusable menstrual pads and cups you are no longer exposing yourself to the potentially harmful chemicals and synthetic materials found in most disposable pads and tampons, making them better for our environment as well.”

## REFERENCES

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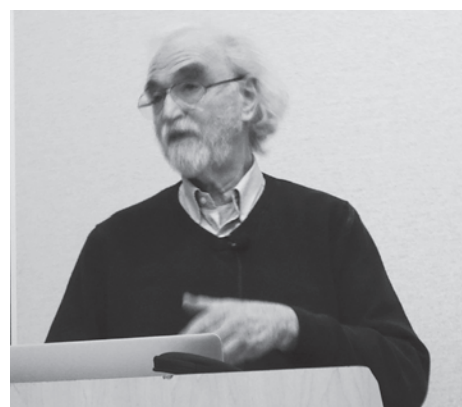
## CONFERENCE SPEAKERS



Indefatigable activist for raw milk Mark McAfee of Organic Pastures Dairy inspires attendees at the closing ceremony. Organic Pastures donated butter, cheese and sixty gallons of raw cream to the conference!



Naturopath Phillip Weeks, from the UK, was a new and very popular speaker at Wise Traditions.



WAPF was honored to host Professor Gerald Pollack from the University of Washington. His work on water has revealed water's many unique properties.