

Avoiding Toxic Chemicals in Back-to-School Supplies

By Terri Hirning

The Great Plains Laboratory and The Thinking Moms Revolution, Team TMR

As we move into back-to-school time, parents may have questions about how to avoid toxic chemicals in school supplies. What used to be an easy task has gotten harder in recent years, especially with the advent of antibacterial agents like Triclosan and Microban, which are often now applied to school products. As a parent with a background in this issue, I would like to provide you with some helpful information. One great resource is an article by Dr. William Shaw titled "[The Unique Vulnerability of the Human Brain to Toxic Chemical Exposure and the Importance of Toxic Chemical Evaluation and Treatment in Orthomolecular Psychiatry](#)" published in the *Journal of Orthomolecular Medicine*, Volume 25, Number 3, 2010. His article chronicles his own exposure to a compound similar to Triclosan and the negative health effects he suffered. Triclosan has recently gained favor within the marketplace, now commonly being added to hand soaps, hand sanitizers, and even toothpastes. Microban is also a common antibacterial compound added to many back-to-school supplies. According to the official Microban website:

*"Microban® antimicrobial product protection is engineered to protect products from bacteria, mold and in some cases algae that can cause stains, odors and product deterioration. **Microban protection is not designed to protect users from disease causing microorganisms.** ... Microban product protection inhibits the growth of microorganisms that can cause stains, odors and product degradation."*

Does this compound protect your child from germs? No. From their own definition, it protects objects from deterioration. What happens when a product, like a pencil for example, gets chewed on by a student? When we look at the chemical compounds themselves, while Microban and Triclosan may be similar, they are not the same. As per the Environmental Working Group:

*"Contrary to popular belief, Triclosan is **not** the same as Microban. Triclosan is officially registered under the EPA as "Microban additive B" – that is to say, any given product sold under the Microban trade name does not necessarily contain Triclosan. Which antimicrobial agent is being used for those products, however, the company will not disclose: it could quite literally be anything!"*

Is that comforting? Speaking strictly as a parent, not at all! We now know that many of these chemicals have not had adequate safety studies and often change names and formulations to work around restrictions and bans by regulatory agencies. How can we guide parents who want to avoid these compounds entirely? The list below includes items often containing either Triclosan or Microban:

- pencils, pens, and crayons
- backpacks and lunch sacks
- binders
- rulers
- scissors
- pencil sharpeners
- calculators

- computer keyboards
- socks (!!)

What can parents do to protect their families from these chemicals? The first step is understanding why they should be avoided. Physicians and practitioners certainly play a large role in this step, educating parents and patients about these chemicals and the impact they can have on the body. The Great Plains Laboratory's new [GPL-TOX](#) test can be a valuable resource for educating families about their current toxicity levels. Great Plains can also provide recommended methods to both detoxify the body and then reduce future exposures. Part of this education also means showing parents what to look for when shopping for school supplies. These products are labeled with Triclosan and Microban and can be identified with close inspection of the products prior to purchase. The next step is providing alternative products to their toxic counterparts. Below is a list of eco-friendly and low toxicity alternatives that can be a great resource for parents:

[PlanetBox](#)

[Lunch Bots](#)

[Enviro Products](#)

[The Ultimate Green Store](#)

Many of the above online stores carry lunch boxes. The other items (pencils, scissors, crayons, etc.) can often be found free of Microban and Triclosan by simply checking the other shelves in the store. Most stores do carry both forms (with and without Microban or Triclosan) so by checking the selection and choosing a different option, parents can eliminate these exposures altogether. Lunch boxes can be harder to find without these chemicals, so the above web sites can be helpful, as can health food stores like Whole Foods Market, Natural Grocers, and Sprouts.

While shopping for back-to-school supplies may be a little more complicated these days, knowing what you are looking to avoid and spending the extra time to choose toxin-free options is well worth it for the health of your family. Best wishes for a successful and toxin-free school year!