

The Osborne's Green Journey, Part 4

Michelle learns that common household products, such as dryer sheets, contain nasty chemicals.

by Donald Fraser



The quest for a more sustainable lifestyle has introduced the Osborne family to some cool gadgets. Two months ago, it was the large red blower door used for a Green-Up home energy audit. This time, it is the indoor air quality gadgetry provided by Stephen Collette of Your Healthy House.

Opening his silver metal, foam-lined briefcase, he removes objects that look like they belong on *Star Trek* with their flashing lights, and ever-so strange sounds. But these tools have a down-to-earth purpose – they are used to detect chemicals and gasses in the home.

Even more impressive than Stephen's electronic sniffers is the knowledge that he brings. Sitting down for an hour with Stephen, both Michelle Osborne and I become a lot more aware of some of the dangers that lurk in our own homes.

Peterborough Kids is tracking the progress of the Osborne family as parents Jerry and Michelle try to make their lives more ecologically sustainable. This month, they are working on indoor air quality.

The first thing that Stephen wants to chat about is a cleaning product few would consider problematic – dryer sheets. “They’re horrible, horrible products,” Stephen reveals. “They contain a number of nasty chemicals, including formaldehyde – a carcinogen – which we then wear against our skin all day long.”

“Scary,” says Michelle, who stopped using dryer sheets a few years back. She now uses a combination of dryer balls and reusable dryer sheets, two

non-toxic options that she feels are better for her children.

Disposable floor cleaning pads also use formaldehyde, notes Stephen. And they leave a film of this carcinogen on whatever they pass over. It is with relief that Michelle points out that she no longer uses the microfibre cloths.

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Unfortunately, Michelle and her husband are still using regular laundry detergent, which can be harmful to kids, according to Stephen. “Most detergents contain estrogen mimickers that disrupt the normal development of children,” he notes.

Fabric fresheners are also a bad choice, says Stephen. “They contain 12 per cent methanol – a gasoline additive – and work by numbing the brain. Using them is kind of like sniffing gas.” Michelle vows to take the never-used can of fabric freshener she bought a few years back to the hazardous waste depot.

“Of course, there are more than just cleaning

products to think about,” says Stephen, “including airborne particles and moisture levels.”

Two culprits when it comes to airborne particles are the furnace and the vacuum. “Both your furnace and your vacuum kick up plenty of dust and allergens that can get lodged in your nose, throat, and lungs. It can often lead to respiratory illness,” says Stephen. He recommends using a 3M brand Filtrete furnace filter. “It’s about as good as you are going to get, unless you pay the big money for HEPA filters.”

Vacuums pick up dust and fine particles and spit them out again through the bag and exhaust system, notes Stephen, so make sure you have a good filtration system. “You can buy upgraded filters and bags or you can buy a vacuum with a HEPA filter for as little as \$150. Either way, you want to stop these particles from being airborne in your home.”

Michelle, who admits she needs a new vacuum, perks up when Stephen starts talking about humidity levels. After all, they have recently bought a new humidifier. “Make sure that you use it properly,” Stephen advises. “You want a humidity level somewhere in between 35 and 50 per cent. Any more than that and you have a perfect breeding ground for mould, any less and you become a breeding ground for viruses.” Viruses, he explains, need somewhere humid to grow. And if your nose and throat are the only areas they can find, they will be attracted.

Another important issue for the home is “offgassing,” says Stephen. He explains that “many of the non-metallic surfaces in your home release materials through evaporation. For example, plastics, vinyl, varnishes, and stains all release chemicals. Some fade over time, while others, like vinyl, increase as the years’ progress. It pays to know what new furniture, flooring, cabinetry is made from – and how these products will affect you – before making a purchase.”

Michelle is disturbed by what she has learned from Stephen. “There are so many things that you don’t think about as being harmful in your home. So many products and scenarios that can affect your child’s health and development.” Her advice to other families: “consult an expert. And if you can’t do that, for whatever reason, then hop online and start your research.” She pauses before adding, “For the health of your children.”

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Chemical contaminants

Volatile Organic Compounds (VOCs)

The list of VOCs found in the average home is long, but common ones include formaldehyde, acetone, and methanol. VOCs can leak out of construction materials such as foam insulation, paint, carpets, linoleum, structural timber and floorboards. They are also produced by cleaning products, such as air fresheners, detergents, and disposable cleaning products.

Young children are most at risk if exposed to VOCs because their respiratory systems are not fully developed. VOCs trigger eye, respiratory and digestive tract irritations, headaches, giddiness, dizzy spells, and nausea. Many are carcinogens; many act as hormone disruptors and affect the healthy development of the child. Always read labels if you suspect you are bringing chemicals into your home. Use products with VOCs sparingly, or, preferably, not at all. Dispose of them safely.

Biological Contaminants

Mites

The droppings of these barely visible critters are the main source of allergens in Canadian homes. They live primarily in mattresses,

pillows and carpets, and trigger allergic reactions such as asthma, chronic colds, and allergic inflammation of the skin (dermatitis). You can control mites by keeping the household humidity level below 50 percent, by avoiding objects that collect dust (non-washable stuffed toys, heavy drapery), and by regularly cleaning fabrics (carpets, rugs, sheets). Remember to make sure the filtration system of your vacuum cleaner is changed regularly.

Moulds

These microscopic fungi thrive in damp, poorly ventilated areas. When it begins to accumulate, mould can cause eye, nose, and throat infections, aggravated sinuses, and improve the risk of childhood asthma. You can reduce the chance of mould growth by ensuring the home is well ventilated and by keeping humidity levels between 35 and 50 percent.

Allergens

Common allergens, such as pet dander and pollen, can lead to runny noses, sneezing, watery eyes, coughing and wheezing, headache and fatigue, and even major asthma attacks. You control them in the same way you would mites and by having appliances such as furnaces, air conditioning, and central air inspected and cleaned regularly. Change furnace filters every three months.