Living well: Optimizing your nutrition & detoxifying your kitchen
Session I: Clean & Green

Olga Naidenko, PhD (00:00):

But now on to cleaners. EWG has been doing research on cleaning products for quite a few years now from the early 2010s. It has been a very important topic for us, which kind of continued from EWG-established and flagship research on personal care products that perhaps some of the audience members know about. And we can talk about that a little bit, if we have time at the very end on the Q&A. But talking about cleaners, EWG has published various guides to healthy cleaning, looking at label decoders. What do the names or ingredients sometimes names of specific chemicals, other times, names of kind of undecipherable ingredients, tell about the cleaning products themselves? And I really want to talk about why I said at the very start that cleaners are probably some of the most toxic products.

Olga Naidenko, PhD (00:59):

Well, it's life experience. We all know that certain cleaners simply should not be mixed together. Trying to avoid children's exposure to many cleaning products is also super important. Also, even once the cleaning product is used according to the label, there can still be ingredients and impurities in that product that can harm my health or that can be harmful for the wildlife and environment when the cleaning product, if it's something that ends up going down the drain, goes into the wastewater treatment plant and then is finally released into he was stain. So, the hazard to the health of the user is a concern, also the health of professional cleaning, and then the downstream effect. And then there is this myth of a clean house that something smells like a clean house, and that is good. It's not just a myth because it's not true, but it's also a really dangerous myth because it sort of creates this culture of a home has to smell a particular way.

Olga Naidenko, PhD (02:03):

And it's actually that smell of clean house, that many people interpret as such, is actually the smell of fragrance chemicals and solvents that are added to many cleaning products, such as the product that people spray to clean windows, such as the products that are sprayed to clean the counters. And when we inhale those chemicals, or when people who clean professionally for living — which means that they exposed to those chemicals for eight or more hours a day — when these chemicals are inhaled or absorbed through the skin or ingested, there is a really terrible outcome, but unfortunately this can and does happen. That is the time to call the poison control center. So, those kinds of chemicals are really posing the risk. The most immediate impact is allergies and asthma, and many people are familiar with those impacts of cleaners. But also, some of the cleaner ingredients particularly kind of professional grade cleaners, contain some solvents.

Olga Naidenko, PhD (03:01):

Some of those solvents are known to harm the reproductive system. Some of those solvents increase the risk of cancer. Very often people say: "But I just like it clean that way," and that baking soda and vinegar might not get it to that particular kind of elusive mythical standards. Then when one looks at their risks and thinks about the exposure for people who do it professionally, that's when kind of making those healthier choices is looking more and more attractive. So, some of the EWG top tips for healthy cleaning. … Fabric softeners. Fabric softeners are basically one place in our cleaning and washing routine where there is a lot of fragrance added to the product, but fragrance does not just come along. It's not just the nice smell, or what some people call the nice look.

Olga Naidenko, PhD (04:00):

It's also the chemical solvents that basically are necessary to impart the smell too whichever product, be it a spray product, be it fabric softener. And as I had a little, insight right at the beginning, that EWG is now doing research on this type of product and specifically looking at the air quality impact of the use of different type of products. Basically, in the lab, but in the conditions that would look as if somebody was trying to clean a counter at home, what we are finding is that fragrance is very often kind of like a marker, and we are finding indications that there other not-so-good chemical ingredients in a product. Air freshener is another place where fragrance is the hygiene. And again, it's not just the fragrance that a person identifies by olfaction. It is the solvents, many of which have been found to harm the reproductive system, harm the nervous system, and increase the risk of cancer.

Olga Naidenko, PhD (05:05):

It does not mean that somebody in our audience or in the wide world should immediately throw away the fabric softener they may have on their shelf today. Now, I personally would throw it away. It is my personal preference. But also, is if one looks for products, avoiding fragranced products has been an overall EWG recommendation. And now we have all-new EWG research that we are now working on, preparing for sharing with a wider audience, which really shows how it's not just the smell — it's the solvents, and skipping those products is EWG's recommendation. And then, of course, caustic products cleaners, degreasers. Yes, using elbow grease is not fun, but some of the caustic products, they also have very bad impact on quality and can potentially, in some cases, be deadly — but even the respiratory impact that one can experience from caustic products is best avoided.

Olga Naidenko, PhD (06:11):

This is my last slide of the cleaner section. I am sure we will have lots of questions in the Q&A about the cleaning product labeling. This is an area that EWG works a lot on and there's need for so much more disclosure. There are a lot of popular marketing statements, which, because they are not like binding statements. … I talked about avoiding fragranced products, and looking at products, which say fragrance free is a good start. It just gets stuck here because cleaning products are not required to disclose their ingredients. They may list very generic ingredients' names and then some marketing statements. At the very least, I would recommend not just looking at the front of the bottle, but also looking at the back of the bottle to see what it says on the back. We often see marketing claims, like all natural and nontoxic. Perhaps they are well intentioned — perhaps is the operative word here — but also at the minimum one should look at the ingredient label, And then EWG

Olga Naidenko, PhD (07:24):

and many EWG supporters continue to advocate that cleaners must be required to disclose all ingredients in a very similar way that personal care products are required to do the same. There are still some tricky exceptions around fragrances, even on personal care products. All foods, fragrances, and flavors are not fully disclosed, but more disclosure is always better. So here I'm going to stop sharing and I'm looking forward to coming back to the conversation with Jean and Lynn, so we can dive deeper. What should I do to avoid the most toxic products while still cleaning my home or asking somebody to clean it and telling them which products to use?

Jean Sachs, LBBC (08:07):

Thank you. So, I think it's really clear that less is more with cleaning products. I think it's hard for consumers because there's so much advertising and a lot of this is safe, and you go to the store

and there are so many cleaning products. But I think in the chat, Meg made the comment that often vinegar and baking soda can clean a lot of what you need. So, I think that's one of the big takeaways. I think there are some questions about essential oils, and are they safe? And I know not all essential oils are the same, but if you could answer that, and then I'm sure Lynn will have another question for you.

Olga Naidenko, PhD (08:53):

Awesome. So essential oils are really interesting and indeed also very popular. They're very popular in the complementary medicine field, in the field that is now calling itself the clean beauty field, but basically really in the amount diversity of personal care products. And some of those oil extracts are now also becoming used in cleaners and put in cleaners that calls themselves green. Here, air quotes are quite appropriate because again, the label green has been used and overused in so many settings. What research shows on the essential oils is that actually many people can develop allergic reactions to them, and that repeated exposure and high-dose exposure to basically concentrated essential oil. Or even, for example, extracts from lemons and oranges. There is a substance called limonene that has a smell,

Olga Naidenko, PhD (09:58):

so it is a fragrance chemical, but it also is a popular solvent-type ingredient in cleaning products that advertise themselves as being better for human health and the environment. But we also know that that specific ingredient and many other substances in essential oils can trigger allergic reactions. So, indeed, there are so many oils that one cannot make one blanket statement, but it goes both ways: not a blanket statement that all essential oils should be treated with caution, not a blanket statement that all essential oils are safe just because they're natural. So, I want to bring in my last slide for the section, the topic that the claim that something is natural because it comes from a plant, it does not mean that it's OK for me to pour it on my skin, or to pour it on my car, and with enthusiasm rub it around. So, I would say that starting slow is how I would recommend using essential oils. Many people do enjoy when they make their own homemade cleaners adding a few drops of essential oil, because they do enjoy that nice smell. But I would say starting slow and testing before applying and infusing in large quantities is the way I would go.

Lynn Folkman, LBBC (11:15):

Thank you. So, I know a lot of us grew up using bleach. I know bleach is not something … but is there anything that is a substitute for that, to get things that clean or really, like you said, basically, and Jean said as well, vinegar and baking soda, you might not get the same effect, but you're going to get things clean.

Olga Naidenko, PhD (11:40):

That is a, a great question. And I would love to kind of bring parallel factors of discussion. One is indeed, our social expectation of how we want a house to look, what is my standard? Everybody has their own different standards with respect to that look, but also there is a degree of realism about, well, I can get the same effect if I scrub with baking soda. I'm a big user baking soda. I can get the same effect from five minutes scrubbing or 30 seconds a week of bleach. Which one am I going to do if I am a busy parent with a full-time job, and the dog that wants to go for a walk?

Olga Naidenko, PhD (12:24):

So, I think many people appreciate bleach because of the convenience. And people feel that, “Oh, sure, it smells bad. And I know it releases chlorine. But what's one thing?” But then they would say what in that is a framework that “Yes, it is faster, and what's one exposure, what’s two exposures?” And then that framework becomes a life framework. And we do know that chlorine is a gas. Chlorine itself is very corrosive, but also various kinds of chemical byproducts that form with chlorine or similar substances in bleach mix with water — then they can cause as a byproduct that we also inhale and that can in fact increase the risk of cancers. Epidemiological studies show not the use of bleach, but those types of chemical byproducts that happen upon bleach mixing with water. So, there has been a lot of innovation in the sphere, and we all know that there are basically hydrogen peroxide- or oxygen peroxide-releasing products, which are according to their marketing claims will provide performance comparable to bleach.

Olga Naidenko, PhD (13:31):

I have not done and the EWG has not done a side-by-side efficacy study. EWG does recommend avoiding to the greatest extent possible avoiding chlorine-based bleaches because the risk for the inhalation toxicity and for accidental misuse by a child or somebody who is, not quite together today. So, we are very concerned about accidental exposure in the kitchen that having those types of products in the kitchen is just an extra risk that is easy enough to avoid. I’m laughing because who is going come into my kitchen to check how clean it is? It is clean enough.

Lynn Folkman, LBBC (14:19):

There are a lot of questions coming in about that disinfectant. What do you suggest for maybe wiping down counters, getting rid of germs, and things like that? Is there something that can be added to the baking soda and vinegar that can help that? I know we have so many questions, and we're trying to get through as many as we can.

Olga Naidenko, PhD (14:49):

I would love to separate the common household cleaning, which is what we all do, from the reality of the pandemic that we are in, which does change the calculation. Because when we talk about the hospital setting, when we talk about the setting where there is a person who perhaps is immunocompromised, perhaps there has been a risk of COVID or another really dangerous infection, that is a situation very different from when we are talking about ordinary cleaning in the household, where people are enjoying the kind of standard baseline. And, of course, members of our audience today have experienced certain types of treatment. They may very well have a concern about being immunocompromised and look for that more intensive treatment. So I do want to emphasize that that does change the calculation, that there are cleaning products out there that a certified to remove bacteria and viruses to a particular degree. And that people may very well choose because of immunocompromised status because of the recommendation of their physicians to avoid, people may choose those products. If that is not called for, vinegar can do wonders. But if it is called for, then we are looking for products which would be more similar to products in hospital settings. So, I want you to kind of deepen the distinction very much with the realization that being immunocompromised is the reality for many people in our society and perhaps in our audience.

Jean Sachs, LBBC (16:24):

OK, great, Olga. There are a lot of questions about what specific products they should use. So, I just want to refer everybody: take out your phone and download Environmental Working Group’s Healthy Living app. You can take this to the store, use your picture, scan the QR code,

and it will tell you whether your product is safe or not. I think it's too hard to go through every product, but if you don't want to do that, you can look through their list. Everything is graded, A, B, C, D, E, F. So that's the best thing to do. Again, download that app. I use it all the time. I'm going get to the next section, but there is one person who's asked multiple times if it's safe to use the microwave. And my understanding is the microwave is safe. Don't put plastic in the microwave, and maybe don't stand in front of it. But is it OK for people to use their microwave to heat up food?

Olga Naidenko, PhD (17:24):

Indeed, Jean, very fair point. EWG does get the question all the time. EWG is very realistic about it. Reheating food is important and reheating it on the stovetop is not often practical. So, yes, the microwave is good to use, indeed. There is no need to stick one's nose next to the microwave. If one has concerns, fair enough. One can put the food in the microwave, press the on button, and walk away into another room, or however far one feels like, and come back to use the food. But again, our recommendation for microwaving is to focus on is to avoid microwaving in plastic containers.