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Building A Greener Kitchen Part 2: Cleaning & Maintenance

Keeping a kitchen safe requires proper cleaning and maintenance. However, not all cleaning products are equally made. Many of the currently available products raise some serious concerns for human health and the environment (Government of Canada, 2019; Ivankovic & Hrenovic, 2009; Yuan et al., 2014). The following article will dissect these concerns in detail and provide alternative solutions that are both easy and cost-effective.

Why are cleaning products bad for health?

Cleaning products contain a variety of chemicals that can be irritable to the average healthy individual, and life-threatening to those who have pre-existing health conditions (Gerster et al., 2014). Products like aerosol sprays, air fresheners, bleach, and oven cleaners often contain volatile organic compounds (VOC). Common VOCs comprise formaldehyde, benzene, toluene, acetone, and ethanol. Short-term exposure to such compounds can cause eyes, nose, mouth, and skin irritation, whereas long-term consequences can include breathing problems and in severe cases, death can occur (Gerster et al., 2014; Government of Canada, 2019). Furthermore, cleaning products may also contain surfactants, or “surface-active agents” (Ivankovic & Hrenovic, 2009). Surfactants have the potential to accumulate in the human body and cause various physiological problems (Yuan et al., 2014).



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Why are cleaning products bad for the environment?

The main issue with chemicals is that they are rarely biodegradable and thus, increase in concentration over the years as one review study revealed (Sillman, 2003). Briefly, the study explained how VOCs contribute to air pollution by reacting with nitrous oxides in the troposphere, resulting in ozone formation. Ozone occurs naturally in different atmospheric layers in varying concentrations. Yet, in polluted cities like New York and Los Angeles, ozone concentrations exceed natural levels and create smog. On the other hand, surfactants contribute to water pollution as they are often discharged into various water bodies through plumbing systems (Jackson et al., 2015). Once in the water, surfactants can harm marine and freshwater ecosystems.

What are the alternatives?

With current concerns for the environment, scientists are looking to innovate non-toxic products. For instance, multiple natural surfactants derived from plants are under investigation (Pradhan & Bhattacharyya, 2017). Unfortunately, many such products are not yet out on the market. As well, as a consumer, it can be difficult to spot eco-friendly products as brands tend to misuse labels like “green” and “non-toxic”. Ultimately, the best way to find the right product is by doing some research beforehand. It is not easy to remember all existing toxic compounds but staying informed about the most common ones can make it easier to identify harmful products. Alternatively, a quick search of a specific product will make shopping simpler.

Finally, the easiest solution consists of using all-natural products that are found in the kitchen. First, in terms of odours, keeping the windows open or the ventilation fan turned on above the stove while cooking can help get rid of strong smells. As well, cleaning pots and pans immediately can also prevent the accumulation of kitchen odors. Additionally, another solution is to dispose of garbage daily and washing the can frequently. Placing the garbage can in another room such as the garage may not be the best solution since VOCs or odours from the garage can seep into the house through tiny openings or cracks. Second, to clean your kitchen, you can make cleaning products by mixing vinegar, lemon juice, baking soda, Castile soap (plant-based), and other natural ingredients depending on intended



use (ASEQ-EHAQ, 2017). Lastly, to freshen your kitchen, simmering spices on the stovetop is effective and safer than aerosol air fresheners.

A Few Final Tips

When looking for a cleaning product, look for plant-based options. A complete list of safe cleaning brands can be found on the ASEQ website (2017). Here are a few examples:

- Attitude Products
- Benefect
- Echomax
- Nature Clean
- The Unscented Company
- Seventh Generation

Look up how to make homemade cleaning products. The following ingredients are commonly used for such purposes (ASEQ-EHAQ, 2017; Cowan, 2020):

- White vinegar – fights grease; good disinfectant
- Baking soda – lifts stains; deodorizer
- Lemon juice – fights grease and stains; natural citrus fragrance
- Vegetable oils: e.g., olive oil - fights sticky residue
- Cornstarch – fights grease and stains
- Salt – good disinfectant

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