

Lorelei Looker

Rethinking Clean

Our health is composed of numerous aspects. A healthy diet, frequent exercise, enough sleep, stress management, and happiness are all vital pieces of the puzzle of health. A piece that is frequently forgotten and misunderstood, however, is one's environment. An environment filled with toxins and other pollutants is just as detrimental as sugary, processed foods. Exposure to such environments over long periods of time can also yield many chronic illnesses, birth defects, and other disorders.

People in today's society create harmful environments in their own homes, places of work, schools, and more, due to grave misunderstandings of what is healthy. In an effort to keep one's environment clean, many people use dangerous cleaning products. Most conventional cleaning products release poisonous chemicals that have been proven to cause cancer and other illnesses, and are regulated by our government. Even products marketed as natural and safe can be extremely harmful. This widespread use of chemicals calls for our society to reevaluate what is safe. We need a new understanding of cleaning in order to maintain our health, our children's health, and the health of our planet.

Conventional cleaning products do much more than clean. They release chemicals that are highly flammable, corrosive, and detrimental to our bodies (American Lung Association). Many release hazardous volatile organic compounds (VOCs), which can become one hundred times more concentrated than they are outdoors when sprayed inside, far surpassing governmentally regulated industrial standards (EWG). Research from B. C. Singer and his colleagues found that cleaning products yield VOCs, such as glycol ethers and terpenes. Glycol ethers are chemicals also used in latex based paint.

They are very harmful to human fertility, and are likely endocrine disruptors. Our federal government deems them as toxic air contaminants under the Clean Air Act. Terpenes react with ozone to create formaldehyde, a lethal carcinogen and known cause of asthma, and unsafe ultra fine particles (Singer). These chemicals can easily build up and yield awful effects.

Products marketed as “green” and “natural” also emit dangerous VOCs. Research from Anne Steinmann analyzed twenty-five popular air fresheners, laundry, cleaning and personal care products. They found that every single one released at least one compound considered hazardous by the United States government (Moyer). They released an average of seventeen VOCs. More than half of the products were top sellers, and eleven were called green, non-toxic, or natural. In fact, the so-called natural products yielded at least two hazardous VOCs, and four released at least one known carcinogen (Moyer). For example, Simple Green, a popular product marketed as green and non toxic, releases allylanisole, a known carcinogen (EWG). Corporations can lie on their labels because there are no laws or regulations overseeing a certification process for natural (Moyer). Thus, one cannot trust a self-governed company’s claim that their products are safe. It is equally as likely that their product is more dangerous.

It is not surprising that other research has connected conventional cleaning products concretely with cancer, asthma, fertility problems, brain damage and much more (EWG). First, cleaning products release many types of carcinogens. A study of women living in Cape Cod found that those that used cleaning products were twice as likely to develop cancer. Women with and without breast cancer were surveyed. Breast cancer was found to be most common amongst women who used air fresheners and mold and mildew

cleaners, especially cleaners containing bleach (Main). Benzene, chloroform, and quartz are other carcinogens which are released by many cleaners (EWG). Other studies have found that many cleaners contain harmful endocrine disruptors, which mimic estrogen. Triclosan, synthetic musks, and phthalates are a few of these disruptors (Main). Excessive estrogen is a common factor in breast cancer development, and another reason why cleaning products can be partially blamed for this disorder.

Excessive use of conventional cleaners has also had serious effects on asthma, especially in children. Asthma rates across the country have been constantly rising for the past few decades. Today, one in ten children have asthma. Serious asthmatic symptoms are also the leading medical cause for missed days of school (EWG). This is likely related to the poor air quality found in many public schools. Due to inadequate ventilation, harmful cleaning agents can cause harmful asthmagens and VOCs to build up. Fragrances found in cleaners are also one of the top five allergens known to inflict asthma attacks worldwide. These chemicals are especially detrimental to children. Children are far more likely to develop asthma than adults. They are less able to detoxify their developing bodies. Also, a resting child also breathes twice as deeply as an adult, allowing even more chemicals to penetrate their delicate lungs (EWG).

If one intends to use these dangerous products, it is absolutely vital to take precautions: always keep the area being cleaned well ventilated, spray cleaners directly onto a towel or cloth to reduce the VOCs emitted, dilute the cleaner, and always read labels carefully to prevent lethal mixing. Thankfully, however, there are even safer alternatives: do not buy these products and do not support the damage they are doing to our health and our planet. Instead, make your own cleaners. Homemade cleaning

products are easy to make, less expensive, and make cleaning much more enjoyable and healthy. Here are some common ingredients for homemade cleaners, which can be found in most grocery stores:

Cornstarch: absorbent powder.
Arrow root: absorbent powder; finer than corn starch
Borax: removes dirt; multipurpose cleaner; fungicide; insecticide; great for laundry.
Clay powder: removes stains.
Vegetable glycerin: removes stains; helps water and oil mix.
Washing soda (sodium carbonate): cleanser; removes oil, grease, and odor; pH of 11 (so wear gloves).
Vit E: preservative (with only a few drops)

Baking soda: Deodorizes and absorbs odors; somewhat abrasive; prevents erosion; good for scrubbing.
Salt: abrasive.
Cream of tatar: cleans drains, glass, metal, and porcelain.
White/Apple Cider vinegar: removes grease and mineral build up; fights mold; freshens; cleans glass.
Castile soap: made from vegetable oil; biodegradable; degreaser; cleans clothes.

Herbs can also provide cleaners with the chemical power they need to be as effective against microbes as conventional brands. Many herbs have antimicrobial, bacterial, and viral agents, which keep your environment safe without toxic chemicals.

Herbs can also smell very pleasant, and can replace the irritating fragrances in conventional cleaners. Some popular herbs that can be used include:

Lemon: antimicrobial; antiseptic; bactericidal; insecticidal; stimulating scent.
Cinnamon: antimicrobial; antiseptic; parasiticide; stimulant.
Rosemary: antimicrobial; antiseptic; fungicidal, parasiticide.
Tea Tree: antibacterial, fungal, and viral, powerful immuno-stimulant; antiseptic; parasiticide, disinfectant.
Balsam: antiseptic; parasiticide.
Cedar: antiseptic; insect and vermin repellent.

Lavender: insect repellent; antimicrobial; antiseptic; parasiticide; uplifting scent; popular fragrance.
Citronella: antiseptic; bactericidal; fungicidal; insect repellent; stimulant.
Peppermint: antimicrobial; antiseptic; antiviral; astringent; insect and vermin repellent.
Chamomile (German): anti-allergenic; bactericidal; fungicidal; strengthens immune system; relaxing.

Finally, the recipes for homemade cleaning products are endless! Here are some basic recipes. Feel free to experiment with these recipes: add different essential oils that

you are familiar with, infuse water or vinegar with herbs by allowing the herbs to steep in the liquid and strain, or use variations of similar ingredients, etc.

Herbal Air Fresheners

Boil your favorite smelling herbs with water for 20-35 minutes (roots and seeds must be boiled longer than flowers and leaves), strain, and cool. Add to a spray bottle, with vitamin E or alcohol as a preservative if desired. Spray when needed.

Recommendations:

Kitchen and bathroom: peppermint, lemon, balsam and cedar.

Bedroom: Lavender, chamomile, and rosemary.

Window Cleaner

¼ cup vinegar
½ teaspoon natural liquid soap
(i.e. Dr. Bronner's)
2 cups water
1 tbs cream of tartar (only use for really grimy windows)

Put ingredients into a spray bottle and shake. If you would like, you can put a drop of blue food coloring in it to make it look conventional. Spray it onto glass as needed, and wipe with a cotton or terry cloth.

If desired, one can add essential oils, or let herbs steep in the water and strain.

Dishwashing Soap

½ cup liquid castile soap
½ cup water
1 tsp fresh lemon juice
3 drops tea tree oil
½ cup white vinegar

Combine in appropriate bottle and shake. Other essential oils, and infused water can also be used.

All Purpose Cleaner

2 teaspoons borax
1 teaspoon washing soda
4 tbs vinegar
½ teaspoon nat. liquid soap
(i.e. Dr. Bronner's)
¼ teaspoon tea tree oil
8 drops rosemary oil
8 drops lemon oil
8 drops lavender oil

Dissolve borax and washing soda in very hot water. Strain mixture through fine sieve, and funnel into a spray bottle. Add other ingredients, and shake well. Top it off with hot water, and shake again. Feel free to experiment with oils, and infuse the vinegar with other herbs.

Mold and Mildew Cleaner

Put on undiluted vinegar, and let sit for a few hours or overnight. Use a fan to dry it completely. Vinegar kills eighty-two percent of mold strains.

If that does not work, mix twenty drops of pure grapefruit seed extract with two cups of water, and spray onto area.

If that is unsuccessful, use tea tree. Tea tree kills all mold strands. Dilute two teaspoons of tea tree oil in two cups of water.

It is critical to find out how the mold got there. Find how moisture was allowed into the area. Improve ventilation or fix the leaks to prevent it from happening again.

Rose Petal Scrub

1 cup baking soda
1 tbs salt
¼ cup rose petals

Mix ingredients in a blender. Then put them on area, wet slightly, and scrub. This is perfect for dirty kitchen sinks, and the baking soda prevents erosion by raising the pH.

Lavender Carpet Freshener

¾ cup baking soda
¼ cup cornstarch
 or just 1 cup baking soda
¼ cups lavender flowers
 or 18 drops of essential oils

Mix ingredients in a bowl, sprinkle over carpet, let sit overnight, and vacuum in the morning. This absorbs odors and dirt, and leaves a heart-warming fragrance.

Floor Cleaner

½ cup white vinegar
½ cup water

Combine ingredients and wash floor. Do not soak floor, and there is no need to rinse. This recipe is extremely flexible. Feel free to add essential oils, or infuse the water or vinegar with herbs. Antibacterial and microbial herbs are best. Some suggestions are peppermint, tea tree, bergamont, and cedar.

Toilet Bowl Cleaner

18 ounces of water
¼ cup liquid castile soap
4 drops lavender essential oil
4 drops tea tree essential oil
4 drop lemon essential oil

Combine in an appropriate bottle, and shake well.

Laundry Detergent

½ cup soap chips
½ cup borax
½ cup washing soda

Boil water. When water boils, add soap chips slowly. Remove it from heat and add washing soda and borax. Be careful while handling borax, because it is toxic. Add 4 cups of warm water to a bucket. Combine ingredients into bucket and stir. Then add 1 gallon and 6 cups of water and stir. If you would like, add essential oils at this time. Let it sit overnight to turn into a watery gel. Use ½ cup per load

Making your own cleaners gives you peace of mind that what your spraying into your environment and near your body is safe. Instead of depending on unregulated labels, you can certify the toxicity and natural quality of your products. This is the only way to

ensure safety for yourself and others. You can choose how your home will smell, and remove irritating fragrances from your environment. Perhaps most importantly, making homemade cleaners means you are not supporting the destruction that cleaning products cause to our health, and the health of the environment. We need to reinvent our society's understanding of safe and clean. Thus, making homemade cleaners and sharing them with others is an essential first step.